PRINTING EQUIPMENT ENGINEER

APRIL • 1933

A Technical Publication for Mechanical Executives Responsible for Printing Production, Equipment and Supplies

CONSISTENT PROGRESS

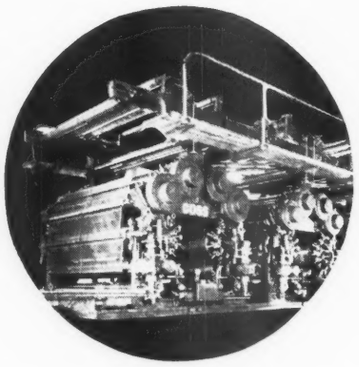
● Someone has wisely said that there is no such thing in industry as standing still—you either go ahead, or you fall behind.

This principle has always been accepted in the Goss organization—with an important corollary: that the best way to move ahead is STEADILY. The improvements which have been made in Goss Presses have rarely, if ever, been publicised as spectacular or revolutionary. Almost without exception, however, they have been sound. We have been satisfied to move gradually but surely, since steady progress creates momentum which tends to keep the forward movement continuous and consistent.

SPEED ● Looking back over the history of the recent past, we take pride in the fact that a 6-unit Goss High Speed Heavy Duty Press in the Manhattan Plant of the New York News last year established an all-time record for high net production. This record is all the more remarkable when it is considered that the press handled a tabloid paper, involving the difficulty of heavy impression, and demanding clean, clear printing of pictures.

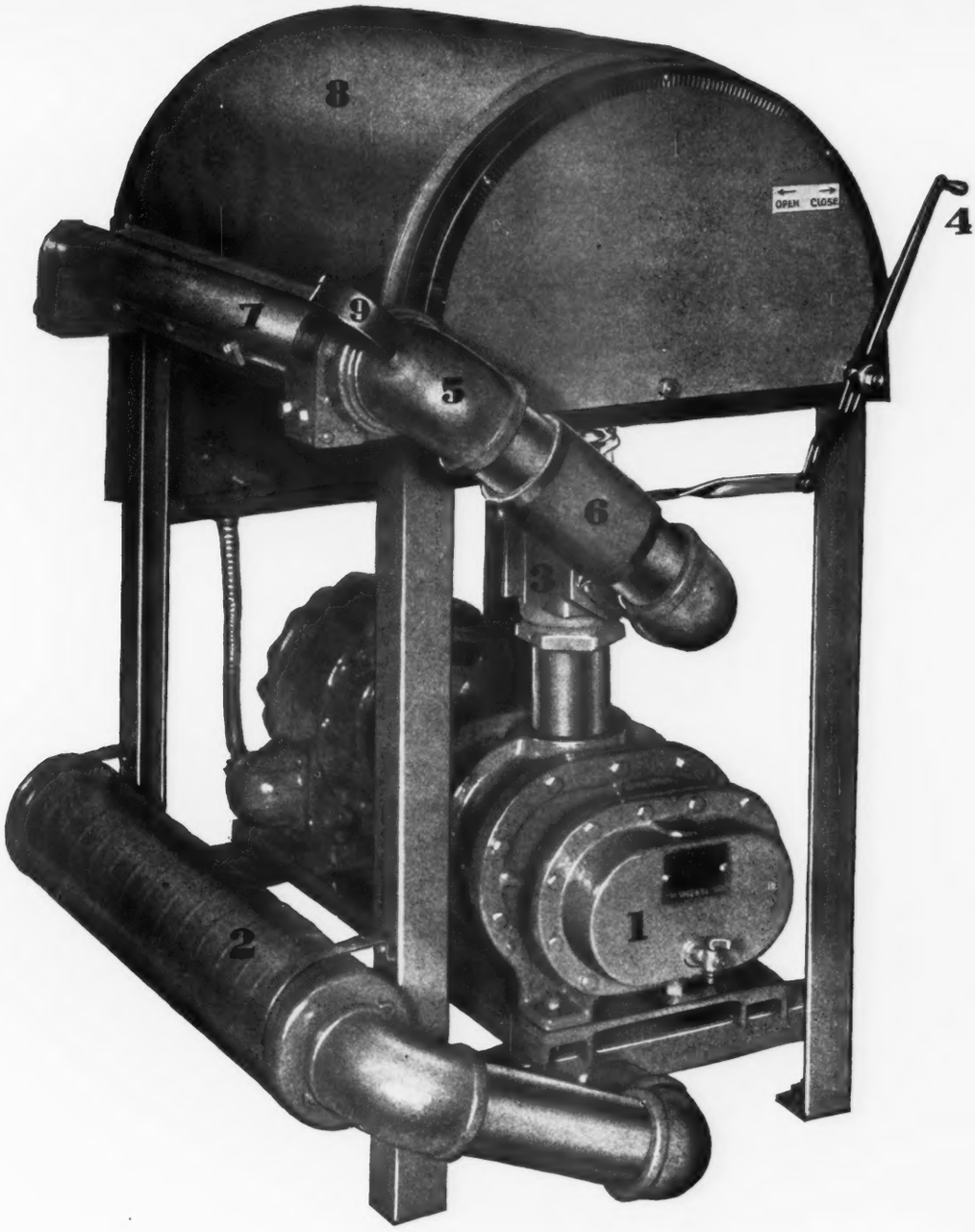
COLOR ● The progress and achievements of the Chicago Tribune in color printing have ALL been realized through the use of Goss Presses exclusively. Those who believe that color printing is destined to be a prominent factor in the future of newspaper publishing, may rest assured that Goss Presses will continue to occupy a leading position in that field.

RESEARCH ● The vital importance of constant research is recognized by no manufacturer of printing equipment more fully than by Goss. Appropriations for this purpose have been and will continue to be liberal. Our research activities . . . conducted by outstanding PRACTICAL press engineers . . . have led to excellent results in the past, and they provide the best possible assurance that Goss Presses will be kept consistently in the vanguard of progress.



THE GOSS PRINTING PRESS COMPANY,
CHICAGO, ILLINOIS
SAN FRANCISCO OFFICE: 707 CALL BUILDING
NEW YORK OFFICE:
220 EAST FORTY-SECOND STREET
THE GOSS PRINTING PRESS COMPANY OF
ENGLAND, LTD. • LONDON

GOSS
STRAIGHT LINE



THE NEW STAHI JUNIOR FORMER

A New Super Stahi Dry Mat Forming Machine for the smaller city newspaper, scaled at lower prices. 16 New Features, (8 as illustrated by numerals above) simplifying its operation, and adding precision to its Forming and Scorching values.

The New Stahi JUNIOR FORMER, produces dry mats with uniform casting levels, and plates with uniform printing levels, adding color and vitality to the printed page. Write for the complete story, and the new plans of purchase. Any Agency or any Stahi office, will promptly supply literature.

STAHI NEWSPAPER SUPPLY COMPANY, Inc.

Portland, Oregon — Seattle, Washington — Los Angeles, California

AGENCIES

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Chicago, New York, San Francisco
GOSS PRINTING PRESS COMPANY, LTD.
London, England

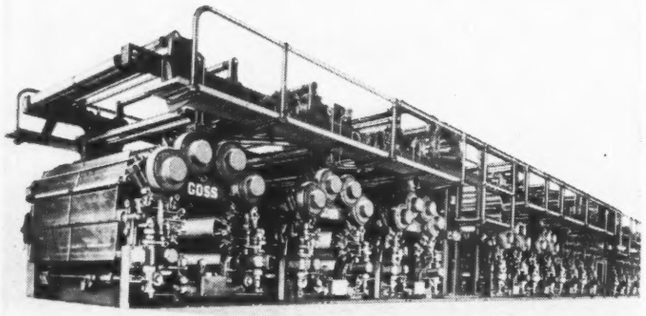
TORONTO TYPE FOUNDRY CO., LTD.
Toronto, Montreal, Winnipeg
NATIONAL PAPER & TYPE CO.
New York, South American Agents

for April, 1933

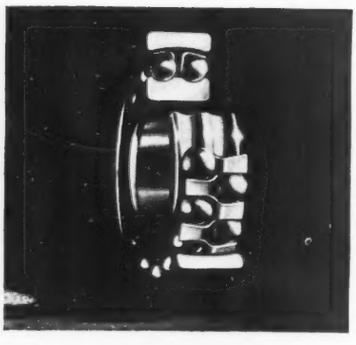
THE SKF GALLERY OF DISTINGUISHED PERFORMANCE USERS:

THE GOSS PRINTING PRESS CO.

624 SKF'S ON THE JOB TO GET OUT HOT NEWS!



624 SKF BALL BEARINGS on this Goss High Speed Extra Heavy Duty Newspaper Printing Press operating in a large newspaper plant share the important responsibility of getting out the news...*while it's hot!* The press consists of ten Double Width Heavy Duty Printing Units and two pairs of High Speed Heavy Duty Folders. Each of the four folders can deliver any size newspaper . . . from four to eighty pages . . . at a running speed of 60,000 papers per hour.



"*Dependability,*" says Goss, "is the prime thought in the design of all Goss presses as they are called upon to handle news . . . which is the most perishable of all commodities. If the press fails for only a moment, the news value of the entire edition is lost." That's why 624 smooth, easy-running, *reliable* SKF Bearings are used on this job for . . . SKF Performance Takes Preference Over Price.

SKF INDUSTRIES, Inc.
40 East 34th Street, New York, N. Y.

3027

WHERE PERFORMANCE TAKES PREFERENCE OVER PRICE

● *You may buy a bearing as a bargain but try and get a bargain out of using it, for nothing is apt to cost so much as a bearing that cost so little*

SKF
BALL AND ROLLER BEARINGS

PRINTING EQUIPMENT ENGINEER

TRADE-MARK REGISTERED U. S. PATENT OFFICE. ESTABLISHED 1910.

VOLUME 46
APRIL, 1933
NUMBER 1

DON WILL, Publisher — MacD. SINCLAIR, Editor

A TECHNICAL MAGAZINE FOR PRINTING'S MECHANICAL EXECUTIVES

This Issue Contains:

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Latest Printing Equipment Mechanisms - - 14

Matrix Crimping Machine - - - - - - 24
Raymond S. Brown

Catalogs, Books, Bulletins - - - - - - 26

Let others also read The Engineer

After you have read this copy, pass this magazine along to the other men in your organization. They will undoubtedly get helpful ideas form its pages.

Check in left column after reading. Note articles of interest.

☐ *Composing Room Superintendent*

☐ *Superintendent Press Room*

☐ *Chief Composing Room Machinist*

☐ *Superintendent Stereotype Foundry*

☐ *Monotype Department*

☐ *Photo Engraving Department*

☐ *Superintendent Electrotype Department*

☐ *Foreman Lithographing Department*

☐ *Bindery Foreman*

☐ *Production Manager*

☐ *Mechanical Superintendent*

☐ *Manager*

☐ *Purchasing Agent*

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Wreck The Night Express!

Smash Every Seventeenth Train That Passes Whistle Junction!

NO RAILROAD president in his right mind would issue an order to "Smash every seventeenth train —." If he thought of it for even a moment he would forsee a main line tied up . . . traffic demoralized . . . costly wrecking crews clearing away debris . . . waste . . . damaged equipment piling high in junk yards . . .

Neither would a responsible executive in any industry ignore, as a matter of little importance, the regular destruction of a part of his product.

Yet, in the average composing room, the equivalent of one galley in every seventeen is, because of errors, thrown into the hell box.

A national survey shows that in every 100 lines of original machine composition six (**6%**) are reset because of errors — one in every seventeen is wrecked. Assuming that only double time is necessary to correct, **12%** (2×6%) of an operator's time is devoted to non-productive effort. So, in the average composing room, **18%** (6%+12%) of all operator-hours are spent in producing and correcting the lines which contain errors.

Adding to this waste the time of proofreaders and floor men in detecting errors and placing corrections, it becomes evident that composing rooms not only are "wrecking every seventeenth train," but *rebuilding* it at many times its original cost.

But it isn't necessary to rebuild every seventeenth line. By having your present matrices treated with the Black and White process — *making reference characters plainly visible in the assembler* — a significant proportion of error waste can be prevented.

This isn't just guess-work. We *guarantee* a 25% reduction in all errors in original composition and *prove this saving* before you pay us a cent.

Matrix Contrast Corporation

Empire State Building New York City

(Sole licensees of the Percy L. Hill Black and White Patent No. 1466437, held valid by U. S. District Court, Eastern District of New York. Infringers will be vigorously prosecuted.

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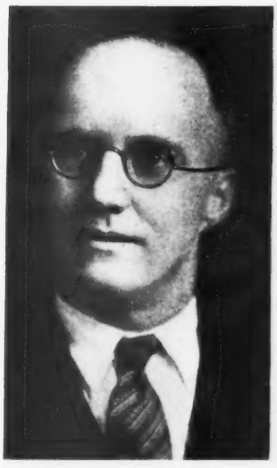
In making a decision, Manager W. E. Wines and the committee members kept in mind the selection of a city which would be located in the geographical center of A. N. P. A. membership attendance. In the boundaries of an imaginary circle with Pittsburgh at its center and the outer edge passing through Chicago, practically all of the large cities east of Chicago are included. This is the territory in which most of the membership is located.

George H. Fuller, Superintendent of Stereotyping, Cleveland "Press," who is recognized as one of the most able stereotyping executives in the country, will appear on the A. N. P. A. Mechanical Conference Program at Pittsburgh. Mr. Fuller has been called into consultation on stereotyping problems on the various Scripps-Howard newspapers.

In common with the consideration of major affairs by the government looking to economy of operation, balancing budgets, etc., the high spot of this year's conference will be economy.

At this moment, arrangements for the program are not complete. However, the first day of the conference will be devoted to a symposium on the economies which can be effected by close cooperation between the editorial department (and the departments which furnish the pictures) with the various mechanical departments. Particular reference will be made to the composing room. For this purpose, an address will be made by an editor, to be followed by a talk by a composing room executive who will be selected from the association's membership list. A speaker who is thoroughly familiar with the various phases of photo-engraving, photography and art work will also have a place on the program. On this program, Oliver Owen Kuhn, managing editor of the Washington *Star;* Leon A. Link, composing room superintendent, Des Moines *Register-Tribune;* and Richard L. Huehne of the Pittsburgh *Press,* will appear as speakers.



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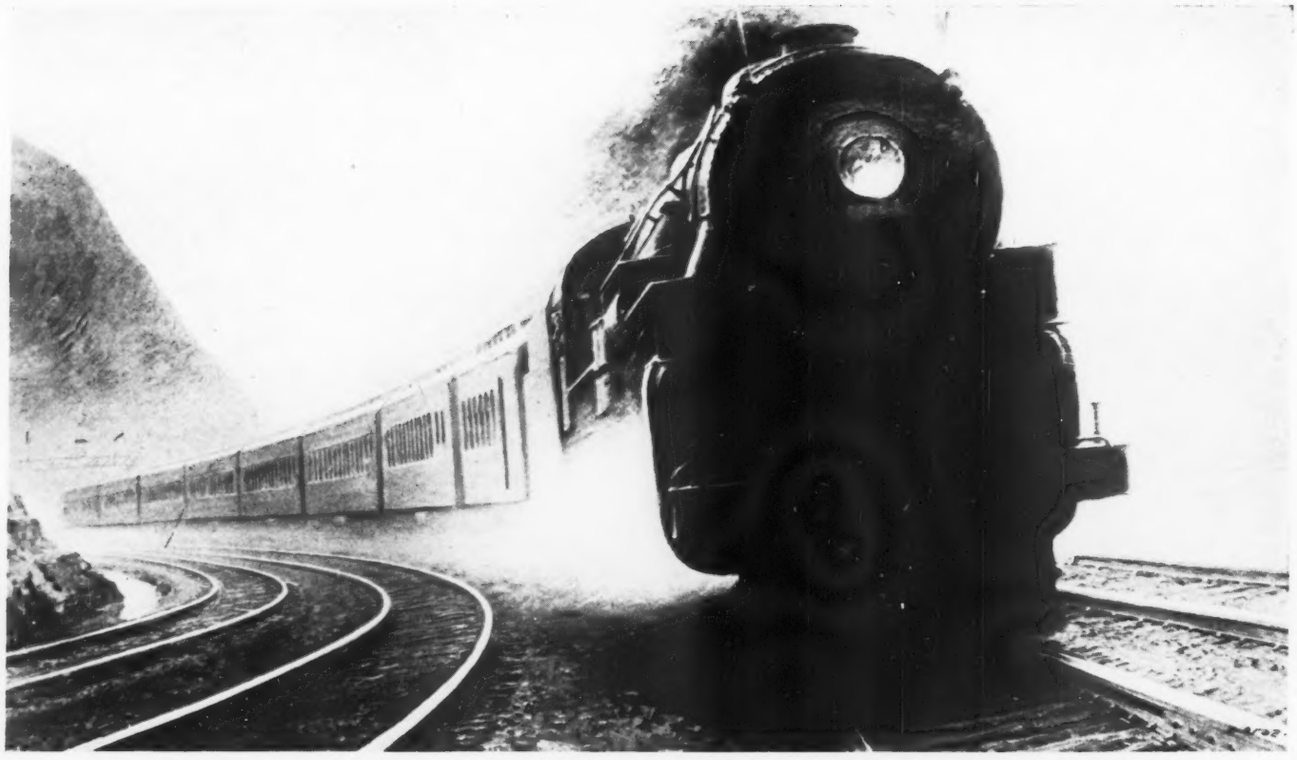

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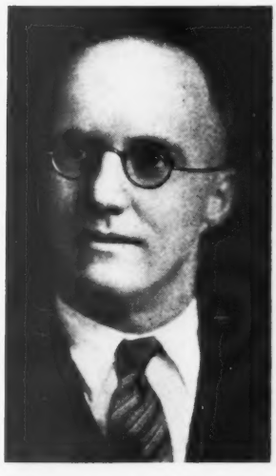

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The morning session of the third day will be devoted to consideration of the use of color in newspaper advertising. This topic is of particular interest to mechanical executives on account of its comparative newness and the controversial nature of the subject in relation to production. The present plan of those in charge of the program is to have some outstanding advertising agency man on the program, including a newspaper man who is familiar with the pioneering work which has already been done up to the present time. Cecil W. Jones, publisher, Minneapolis *Journal*, will speak at this session.

The last session will be devoted to the new newspaper press high-speed roll-changers. Recently there has been tremendous development work done on automatic means for changing rolls. Manufacturers have completed engineering work and several of these devices and their operation will be explained. An opportunity will be extended to those desiring to ask particular questions from manufacturers' representatives.

Conference plans include another comparative exhibit of newspaper printing and also, of course, a list of miscellaneous topics for discussion.

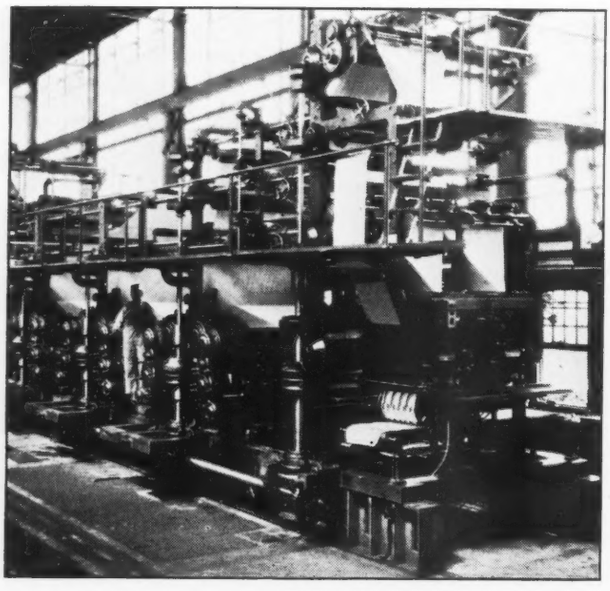
A machinery display and exhibit will be held under the customs prevailing at the A. N. P. A. parent body conventions.

The William Penn Hotel, conference headquarters, has an ample layout of convention rooms. Two of these rooms with a connecting passageway, have been selected. The Cardinal Room will be used for the meeting and the Blue Room for the exhibit. The Blue Room adjoins the elevators on the seventeenth floor and the passage between the rooms will be used for registration.

Manager Wines assures those expecting to attend the conference that hotel room and restaurant prices are moderate.

Philadelphia *Enquirer* Has Press With 2,429 Ball Bearings

By FRANCIS A. WESTBROOK*



Four sextuple Wood press in Plant of the Philadelphia "Enquirer," Equipped with 2429 SKF Self-Aligning Ball Bearings.

THE Philadelphia *Enquirer* has a four-sextuple press equipped with 2429 self-aligning ball bearings. The press is guaranteed for a production of 840 twenty-four page papers per minute at 600 r.p.m. and the use of ball bearings plays an important part in the realization of this high-speed operation. The points of application include the drive shafts, cam roller shafts and vertical shafts. The cam rollers have annular ball bearings between the moving and stationary surfaces. A particularly interesting application is the use of both babbitted and ball bearings for carrying the plate and impression cylinder shafts. The babbitted bearings carry the weight of the rolls and the ball bearings, rigidly attached to the babbitted bearing pedestals and covering the ends of the roll shafts, prevent the bouncing of the plate and impression rollers when an inter-plate gap passes the contact line. This action is due to the fact that excessive wear of the babbitted bearings is avoided by the use of the ball bearings.

The advantage of using ball bearings has also been to eliminate vibration to a very large extent as compared with other more or less similar presses with which comparison is reasonable. Lubrication is simple and inexpensive because the Alemite system can be used, it takes only half the labor and the cost of the grease used in a year's time is at least $400.00 less than the cost of the oil used on babbitted bearing presses of smaller size. The cost of repairs is lower with ball bearings which have a very long life than with the sleeve bearings which need replacing at frequent intervals. Tests have shown, furthermore, that about 21% less power per thousand papers is required to drive the ball bearing press than the babbitted sleeve bearing presses. While this is not looked upon as so important in itself it shows that there is less wear and tear on the machinery, and probably if the whole plant were equipped with bearings by means of which the power bills were reduced 21% the saving might be enough to make a very appreciable difference in operating costs.

*Consulting Engineer, Center Conway, New Hampshire.

The Electric Eye—Man's New Servant

The Eye is Essential for Multi-Color Printing — Degree of Interior Illumination Automatically Controlled

By MILTON E. HANSON*

This is the third and final installment of Mr. Hanson's description of the electric eye which was written for the benefit of our mechanical executive readers. Last month a "dual eye" was described for controlling the position of the paper web as it traveled through the press. The same device can be used in connection with multi-color printing of cellophane.

The dual arrangement is almost a necessity for multi-color printing on cellophane if the web is over 20 in. in width. Cellophane is so elastic and so readily affected by tension and atmospheric conditions during manufacture and storage that rolls wound to uniform tightness throughout, if very wide, are hardly obtainable at present. Fortunately the physical nature of cellophane which presents the difficulties in manufacture and storage can be taken advantage of to prepare the sheet between the roll and the first impression right on the press if sufficient space is provided. The "stretchiness" or coefficient of elasticity can be quickly affected by tension under the influence of temperature and moisture in a period commensurable in seconds. Cellophane as we buy it today is

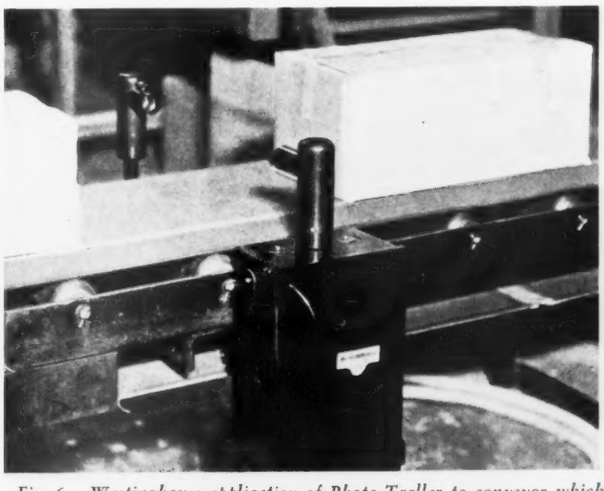


Fig. 6.—Westinghouse application of Photo-Troller to conveyor which automatically counts packages and selectively routes long and short packages to different points on a conveyor.

moisture proof at room temperatures, therefore, the necessity for heat to make the presence of moisture immediately operative. A cellophane web properly treated can be made to remain in a fixed physical condition long enough to complete the printing process. The conditioning art calls for a too lengthy description for this article. Briefly, if the conditioning apparatus is arranged in three parts, center and two margins, with the center condition fixed and the two margins controlled separately by the perforations and the electric eyes, fairly good results may be expected. The proposed arrangement calls for two punches driven from the margin of the web to be placed exactly opposite each other and just before the conditioner. The electric eyes are to be placed after the conditioner. The margin from the slackly wound end of the roll is longer and the perforations on this side get behind those on the tight side. If the conditioner is operated so that the electric eyes react to the perforations in step it is known that the two margins are exactly the same length. For swiftly-moving webs the perforations have to be sufficiently far apart so that there will be about a thirtieth of a second delay between the reactions of opposite electric eyes to detect sufficient margin differences to cause trouble in registry.

When heat is required to dry cellophane inks† between several impressions on multi-color work the problem is further complicated by the fact that a certain moisture content must be maintained in the sheet at all times, below which the drying-out effect will cause dry brittleness and consequent web breaks. Excessive dryness causes marked shrinkage in width, tending to make the marginal perforations converge. This can be detected by the electric eyes and remoistening devices can be made to operate maintaining crosswise registry to prevent breaks. Cellophane is a peculiar material as all know who work with it. Much development work on the

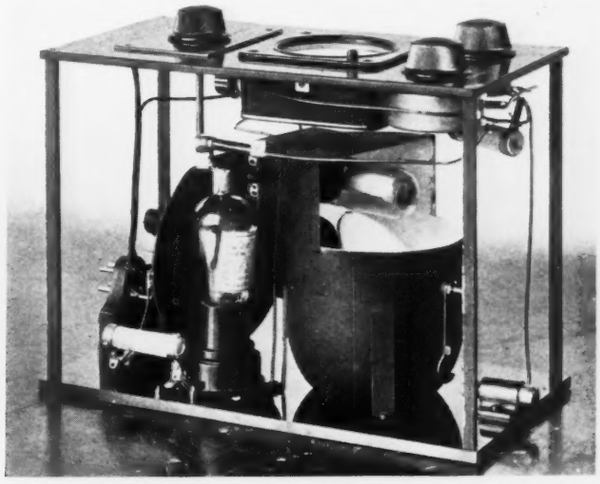


Fig. 7.—This instrument will undoubtedly prove to be of great value in the printing industry. Through its sensitive functions colors or shades may be matched exactly.

printing apparatus for it is yet required to produce really perfect results where close registry is a factor.

COMMERCIAL APPLICATION OF TUBE

Fig. 6 shows a commercial arrangement of the electric eye counting packages and sending the long ones in one direction and the short ones in another by mechanically working a switch in the conveyor. Another light and electric eye may be arranged on the near side, so placed that the light may be

*Mechanical and Chemical Engineer, Collingswood, New Jersey.

†Refer to the author's article "Plastic Printing Inks for Rapid Drying," in PRINTING EQUIPMENT ENGINEER, issues of November and December 1931.—Ed.

reflected off the side of the packages into the hood of the photo-electric tube and if a label is missing the conveyor will stop.

MATCHING COLORS

The electric eye now attains one of its greatest uses in the printing trade, that of matching colors. Fig. 7 shows the device with the case removed and the lid off the reflecting chamber exposing to view the photo-electric tube. It operates from the electric light current. A light of fixed intensity is located just back of the rotatable disk and shines through one of three filters, either red, blue or yellow, mounted in the disk. The filtered light passes into the white enamel-lined reflecting chamber, striking first onto the round mirror, to be seen just under the photo-electric tube, and is then reflected vertically downward. There is an opening in the bottom of the bowl-shaped lower part of the chamber through which this reflected light falls upon the sample at a right angle. The samples to be tested when slipped under the reflecting chamber each reflect back a light distinct to its color and shade, thus illuminating the walls of the chamber. The illumination of the walls directly affect the current flowing through the photo-electric tube. Thus a measure of the intensity of the light reflected is amplified by means of the amplifying tube mounted beside the chamber and is indicated on the current meter shown in the top. By using the proper filter for the primary color under examination and colors to be matched applied to the same kind of surface or material and in the same way exact comparisons are indicated on the dial. One of the knobs on the top rotates the filter disk, another turns on the current to the light and tubes and the other for vernier and zero setting.

MEASURING DEGREE OF ILLUMINATION

Fig. 9 shows a device for measuring the degree of illumination in a room or for the purpose of regulating the illumination. The box contains the amplifying tubes and relay. The photo-electric tube may be discerned under the glass inverted tumbler-shaped enclosure on the box cover. The dials are for the purpose of setting the degree of artificial illumination in failing daylight or the total illumination at night.

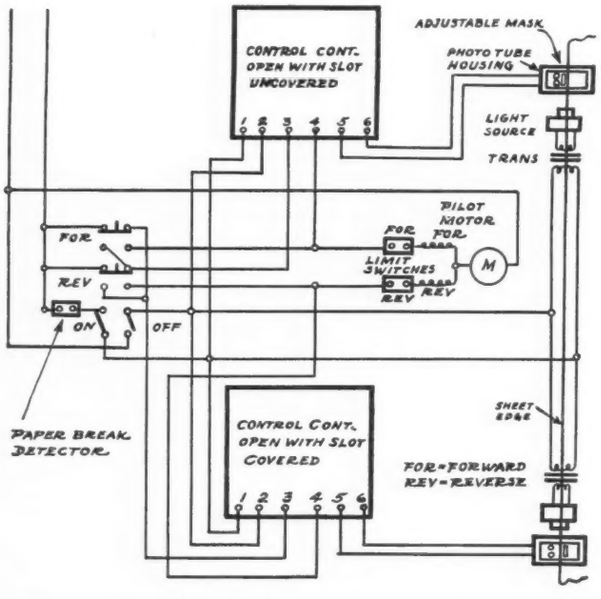


Fig. 8.—Schematic diagram of General Electric Co. Photo-electric Relay 220 V., 60 cycles, for maintaining paper alignment in a printing press. The Relay is applied to the press frame by mounting the photo-tube which has appropriate slits in the housing along one edge of the paper as shown in this diagram. If the paper edge moves to the left, it interrupts the light beam on the upper photo-tube and energizes the control circuit to operate a motor so as to move the paper back to neutral position. The operation is similar for movement of the sheet in the other direction, except that the light beam in this case is normally cut off.

THE "EYE" AIDS THE WORK OF MAN

Thus we have in the electric eye another creation of the "Technocrat" which upon no more analysis than many people apply to such things may appear to be another device believed to displace labor and further so-called "Technological Unemployment." The truth really is, concerning this as for many other inventions, we find upon intelligent inquiry they are most valuable to mankind; that they displace few jobs and create many through extending the scope of many processes. In the case of the electric eye we find it greatly aiding the work of men; matching colors, regulating furnace temperature, safeguarding person and limb, controlling illumination, investigating the nature of light, watching, timing, recording, counting, freeing workers from these slave masters just to the extent of our intelligent application of these improvements to our daily tasks. Thus we march slowly on toward the millenium. Let us apply the acid test: Who wants to return to what we had ten years ago? How about the automobile we rode in then or the home without a radio?

Fig. 9.—Westinghouse Photo-Lux Lighting Control Unit for measuring the degree of illumination in a room for the purpose of regulating the illumination. By its use any degree of illumination may be maintained in a room.

The development of the electric eye opens an inner door into the mysteries of "light," a force little comprehended but with greater understanding of which man can not help but be led into a higher plane of existence.

Moisture in the Mat

A stereotype mat should contain some moisture before moulding so that the proper impression of the form into the mat can be made without injuring the mat. The same moisture is a detriment in casting because it will cause plates to be cast with chilled spots and sinks.

Intertype Cuts Bodoni Bold in 16-pt. Size

Following the recent announcement of the 42-point and 60-point Bodoni Bold Condensed, Intertype now is showing Bodoni Bold in a 16-point size.

THIS paragraph is set in 16 Point Intertype Bodoni Bold $12345

The addition of this convenient size now gives this popular type face a more complete range of sizes than can be secured in most line-composing machine faces. The 16-point size is a one-letter face and is particularly suitable for use as a head letter.

Photo-Lithography and Offset Lithography

Some of the Important Things to Consider Before Investing in Offset Printing Equipment and How to Approach the Question

By FRANK O. SULLIVAN, *Department Editor*

BEFORE branching out into offset lithography, the printer should give thoughtful consideration to several points. Careful consideration of these items will help you to arrive at a decision in a concrete manner. All the enumerated items enter into the success or failure of the beginner in the offset game.

These points include:

(a) The size of your plant.
(b) The length of runs on the presses.
(c) The size of the sheets to be run.
(d) The population of the town or city in which your plant is located, and
(e) How much surrounding territory will be covered by salesmen.

Don't buy equipment because some high-pressure salesman tells you it is just what you will need and that you can't possibly get along without it. Make inquiries, ask questions, consult those who have gone into offset and have made a success of it. There are many who have made very fine successes, and there are some who have learned bitter lessons, and fought against failure. This was more the case in the early days of the offset press than it is today. Much has been learned about paper, inks, presses and photo-mechanical methods, since the advent of the offset press in 1906. More brains are at work solving the problems of the offset lithographer, than in any other branch of the graphic arts.

The Lithographic Technical Foundation, Inc., has issued some splendid technical pamphlets that have gone a long way to help, not only the trained lithographer, but also those who have embarked in this growing industry. Excellent books have been written by Harrap, Crittenden, Rhodes, Goodman, Browne, and others. Much valuable information can be gleaned from these books, but as yet, no primer has been written that a student can follow step by step and not go wrong. It seems to the writer that such a book should be in loose leaf form, so as to keep pace from year to year, with the new methods which are constantly being developed for this industry.

The writer has many inquiries coming to him from printers in every section of the country and, it is in this connection, that he would like to make a few requests. Just read the second paragraph of this article carefully, and then ask him just what you want to know. It will save time and much correspondence, if you will state the size of your plant, the length of runs, the size of the paper sheets, and your outlook for offset business in your territory. If after you have done this, and you require information concerning the layout of a plant, the kind of equipment to buy, the methods to pursue to insure a medium of success in your new venture, the writer will advise you frankly and candidly. He holds no brief from any manufacturer of offset equipment or supplies, and you may rest assured of disinterested advice in the matter.

Please do not write in and ask for full information on photo-lithography, offset-lithography and methods. It would require a volume to give you all this information. But—give the data requested above, and all the rest of such information will be gladly given to you when you have decided to go into offset-lithography. If your output, your geographical surroundings, do not warrant the investment of $10,000 and upwards, you will be told so without any "ifs" and "ands." Just remember that of the three great methods of printing, two of them—letterpress and gravure—are purely mechanical, while offset-lithography is a chemical method of printing, and requires an altogether different method from what you have been accustomed to using.

As such you cannot get any too much information as to equipment and methods, before taking the plunge. That the average printer will finally embark in the offset method of printing, is a foregone conclusion. It is not because the offset press is a lithographic press, that offset-lithography has grown so rapidly. It is because of the rotary motion of the cylinders, every revolution of which gives you a print. There is no lost motion and practically no make-ready. However, offset-lithography is not going to do away with letterpress printing, but it is going to keep pace with the progress of the times in increased, economical output. That is the answer.

Credit for Quotation—In this department (January issue of PRINTING EQUIPMENT ENGINEER) Mr. Sullivan urged the photoengraver to cooperate with the printer in the offset lithographic field by installing the necessary equipment for making offset printing plates. The quotation used in the discussion was published in Mr. Sullivan's department in *The Inland Printer* seven years ago, and was printed in the January ENGINEER to affirm a prediction made by him in 1927.—ED.

March Printing Patents

Printed copies of patents are furnished by the Patent Office at 10 cents each. These may be obtained by addressing the Commissioner of Patents, Washington, D. C.

1,898,034. PRINTING PRESS. Curtis S. Crafts, Oak Park, Ill., assignor to The Goss Printing Press Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 6, 1930. Serial No. 433,749. 12 Claims. (Cl. 101 — 220.)

1. In a printing press, the combination of a frame, a press unit mounted thereon comprising a plurality of cooperating form and impression cylinders, a shaft journaled on the frame beneath the unit, a gear mounted on the shaft in parallel position with respect to the face of the frame, a second gear revolubly mounted on the press unit at right angles with respect to the cylinders, positively acting endless belt driving connections between the two gears, a third gear rotatable with the second gear in parallel position with respect thereto and additional gears carried by the form cylinder of one printing couple and by the impression cylinder of the other printing couple and meshing with the third gear for driving the cylinders in cooperative relation.

1,898,219. APPARATUS FOR THE MATCHING OF COLORS. Clayton H. Sharp, White Plains, N. Y. Filed Sept. 6, 1929. Serial No. 390,710. 9 Claims. (Cl. 88 — 14.)

9. The method of matching the color of a luminous body to that of a body of known color characteristics which comprises alternately projecting upon a photoelectric cell those light waves from the opposite halves of the spectrum of the luminous body of known color characteristics which will produce equal electrical currents in the photo-electric cell circuit, substituting for the luminous body the luminous body whose color is to be matched to the body of known color characteristics, alternately projecting light waves from opposite halves of its spectrum upon the photoelectric cell and altering the color of the body until the light waves thus projected also produce in the photoelectric cell circuit two equal currents.

1,898,331. PLATE CLAMP FOR PRINTING PRESSES. Henry A. Wise Wood, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed July 3, 1931. Serial No. 548,551. 10 Claims. (Cl. 101 — 378.)

7. In a printing press having a rotary printing cylinder, the combination with positive clamping means for securing a stereotype plate to the cylinder, of a spring-pressed latch carried by the cylinder, and adapted to snap into plate-holding position when the plate is pressed thereagainst, the latch being formed with a bevelled clamping edge to permit of pulling the plate off the cylinder.

1,898,406. SILK SCREEN PRINTING MACHINE. Lionel C. Tate, Louisville, Ky., and Harold L. Tate, Chicago, Ill. Filed Jan. 6, 1930. Serial No. 418,765. 26 Claims. (Cl. 101 — 123.)

1. The combination with a silk screen printing machine, of a vertically movable stock receiving bed plate carried by the machine and a screen carrying frame above the bed plate and adapted to rockably cooperate with stock on the bed plate during a printing operation when the bed plate is in its upper position.

1,898 535. METHOD OF AND MEANS FOR FEEDING PAPER SHEETS. Arno Haupt, Heinrich Gumbel, and Julius Giesecke, Leipzig, Germany. Filed Jan. 30, 1930, Serial No. 424,647, and in Germany Mar. 9, 1929. 5 Claims. (Cl. 271 — 12.)

1. A method of feeding paper sheets from a pile to a printing machine, consisting in lifting the sheets by suction from the pile at the rear edge, carrying each sheet forward horizontally under the preceding sheet into contact with the feeding elements to form a thin continuous layer of overlapping sheets, advancing the layer, at each operation of the machine, through part only of the distance between the machine and the feeding device, and adding one sheet to the layer for each sheet taken away therefrom by the printing machine.

1,898,605. PROOF PRESS AND INKING MECHANISM THEREFOR. Robert O Vandercook, Edward O. Vandercook, Frederick R. Vandercook, and David D. Vandercook, Chicago, Ill. Original application filed Oct. 10, 1927, Serial No. 225,287. Divided and this application filed June 21, 1929. Serial No. 372,576. 44 Claims. (Cl. 101 — 355.)

1. A machine having a traveling carriage provided with a printing element and also provided with inking rolls and inking devices, means for continuously driving the rolls when the carriage is in position at one of the ends of its strokes and means for moving the inking devices in contact with the inking rolls.

1,898,610. WEB PERFECTING ROTARY PRINTING PRESS. Howard M. Barber, Pawcatuck, Conn., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed July 1, 1931. Serial No. 548,138. 6 Claims. (Cl. 101 — 417.)

6. In a web perfecting rotary printing press, first and second printing units, an offset web passing around the impression cylinder of the second printing unit, and a non-printing pressure cylinder built up at predetermined points to exert blotting pressure on the non-perfected web at those portions of its impression which will not be subjected to a pressure by the form cylinder or cylinders of the second printing unit.

1,898,624. STEREOTYPE PLATE CASTING MACHINE. Richard J. Greenway, Westerly, R. I., assignor to C. B. Cottrell & Sons Company, Westerly, R. I., a Corporation of Delaware. Filed Apr. 25, 1932. Serial No. 607,407. 4 Claims. (Cl. 22 — 5.)

1. In a curved stereotype plate casting machine, a male member provided with a smooth non-porous heat resisting facing.

1,898,683. TABULATING DEVICE FOR TYPE COMPOSING MACHINES. Thomas A. Payne, Los Angeles, Calif. Filed Sept. 30, 1929. Serial No. 396,381. 13 Claims. (Cl. 164 — 112.)

1. In a type composing machine having an em rack, a stop member carried by the em rack for movement therewith, a support, a stop on the support positioned in the path of movement of the stop member, for coaction with the latter in arresting return movement of the em rack at a predetermined position, and means for rendering the stop member free to pass the stop during advancing movement of the em rack, the last means comprising means for mounting the support for movement to occupy an active position wherein the stop is disposed in the path of movement of the stop member and an inactive position wherein the stop is clear of the path of movement of the stop member, means for normally urging the support to the first mentioned position, and cam means on the stop member engaging the stop during advancing movement of the em rack to move the support to its econd mentioned position.

1,898,723. METHOD AND APPARATUS FOR REGISTERING PRINTED WEBS OF PAPER. Frederic B. Fuller, Springfield, Mass., assignor to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed May 15, 1930. Serial No. 452,691. 9 Claims. (Cl. 271 — 2.6.)

1. Mechanism for controlling the register of an indicia bearing web relative to a web treating machine, comprising a pair of web feeding rolls in constant engagement with the web and rotating continuously in a single direction, means for rotating the rolls at such a speed that they will deliver normally a slight excess of web length, an escapement mechanism operative on the rotating means to introduce at each actuation a definite and predetermined lag into the rotation of the rolls, and mechanism responsive to deviations in the positional relationship of the indicia on the web with respect to the operative elements of the web treating machine in excess of a predetermined minimum for actuating the escapement mechanism.

1,898,798. ART OF PHOTO-ENGRAVING. Paul H. W. Werner, Wellesley, Mass. Filed Mar. 22, 1932. Serial No. 600,573. 1 Claim. (Cl. 41 — 29.)

The method of preparing tinted lithographic prints which comprises applying to the portion of the surface to be tinted a coating which is readily removable with a solvent, then applying to the other portions of the surface and also to at least the marginal portions of the first applied coating a coating which by a solvent is readily removable with the first applied coating where it overlies the same but which is not readily removable by the solvent from the print where it directly contacts therewith, subjecting the coatings to a solvent to remove the first coating and such of the second coating as may be superimposed thereon while allowing the second coating, where it directly contacts with the print, to remain on the print, applying tinting material to the print so as to completely tint the exposed surface thereof, and removing the remaining part of the second coating and such of the tinting material as may be carried thereby.

1,899,055. APPARATUS FOR CONDITIONING DRY MATRICES. Charles A. Pitts, San Francisco, Calif. Filed Sept. 1, 1928. Serial No. 303,486. 2 Claims. (Cl. 91 — 46.)

1. Apparatus for uniformly moistening dry matrices comprising a tank containing a liquid, a pair of feed rollers journaled above and at one end of the tank for feeding the matrices through the liquid, a pair of wringer rollers journaled above and at the other end of the tank for expressing excess liquid from the matrices after passage therethrough, a plurality of pairs of spaced guide bars spanning the feed and wringer rollers; the bars being curved so as to be partially immersed in the liquid and being arranged so that one bar of each pair is below the other bar of the pair to provide passages for the matrices and means for driving the rollers.

1,899,226. WEB LEAD FOR PRINTING MACHINES. Harry V. Ball, Concord, Mass., assignor to R. Hoe & Co., Inc., New York, N. Y., a Corporation of New York. Filed Aug. 20, 1931. Serial No. 558,389. 9 Claims. (Cl. 270 — 5.)

4. In a printing press, a frame a folder on the frame, a plurality of printing units on the frame arranged at varying distances from the folder, a series of web guides interposed between each unit and the folder, the guides arranged so that the web length between each unit and the folder will be substantially equal.

1,899,648. TYPOGRAPHICAL MACHINE. Anthony J. Stouges, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 8, 1931. Serial No. 549,371. 37 Claims. (Cl. 199 — 49.)

1. In a typographical machine, the combination of a line transporter movable vertically from and to a normal line receiving level, a fixed flat horizontally disposed table for supporting a composed matrix line at the level in endwise alinement with the transporter, and manually operated means for transferring the composed line from the table into the transporter.

1,900,090. MACHINE FOR GRAINING LITHOGRAPHIC PLATES Charles Arthur Beckett, Hull, England. Filed Apr. 16, 1931, Serial No. 530,527, and in Great Britain Apr. 25, 1930. 4 Claims. (Cl. 51 — 6.)

1. A machine for graining lithographic plates comprising a trough mounted on a framing and adapted to be subjected to a circular shaking movement, a tiltable false bottom to the trough to which the plates are adapted to be secured, at least one tiltable container for graining elements carried in the trough, the tiltable false bottom and container being tiltable independently of and towards one another for the transference of graining elements from one to the other, means for retaining graining elements operatively in the trough, means for operating the trough and means for mechanically tilting the false bottom independently of the tiltable container and of the trough so as to effect discharge of graining elements therefrom into such tiltable container.

1 900,263. INKING MECHANISM FOR PRINTING PRESSES. Henry A. Wise Wood, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 28, 1927, Serial No. 187,375. Renewed Feb. 8, 1932. 18 Claims. (Cl. 101 — 351.)

1. In a drive for a printing press inking mechanism, the combination with a main driving shaft, of a press drive shaft, a clutch for positively connecting the drive shaft with the main shaft at will, a gear on the press drive shaft, a shaft adapted to be operated by the gear constantly, and an ink fountain roll connected with the last-named shaft to be operated thereby constantly while the press drive shaft is operating.

1,900,264. WEB SPLICING APPARATUS. Henry A. Wise Wood, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 27, 1927, Serial No. 215,933. Renewed May 9, 1932. 2 Claims. (Cl. 242 — 58.)

1. In a web splicing device, the combination with means for supporting a fresh web roll and the expiring web roll and means for guiding the running web from the expiring roll in a path adjacent to the fresh roll, of a soft roll beyond the web movable into and out of position for engaging the web on the side opposite the fresh web roll, while the web is running from the expiring roll, and means for moving the fresh roll into contact with the web in that position to make the paster.

1,900,265. MACHINE FOR CASTING STEREOTYPE PRINTING PLATES. Henry A Wise Wood, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 27, 1929, Serial No. 388,843. Renewed July 29, 1932. 58 Claims. (Cl. 22 — 2.)

1. In a stereotype plate casting machine, the combination with a cylinder and back, of a shaft, cranks rotatable on the shaft for moving the back toward and from the cylinder, and a projection extending from the back and having a cam slot surrounding the shaft, the shaft having a finished surface thereon entering the slot and constituting a guide for fixing the direction of movement of the back.

1,900 266. FOUNTAIN ROLL CLEANER. Henry A. Wise Wood New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Feb. 16, 1931. Serial No. 516,015. 5 Claims. (Cl. 101 — 364.)

1. The combination with an ink fountain and its roll, of a scraper on the return side of the roll comprising a series of fingers spaced apart for engaging the roll and removing foreign matter therefrom.

1,900,288. FOLDING CYLINDER. Hans C. Jordhoy, North Plainfield, N. J., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 21, 1930, Serial No. 476,763. Renewed July 29, 1932. 18 Claims. (Cl. 270 — 50.)

8. In a folding cylinder, the combination with a cylinder proper and studs on which the cylinder is mounted to rotate, means for rotating the cylinder, a folding blade arm shaft carried on stationary eccentric bearings inside the cylinder, two gears connecting the cylinder with the folding blade arm shaft for rotating the shaft as the cylinder rotates in a predetermined ratio, folding blade shafts carried by the folding blade arm shaft, a stationary gear concentric with the folding blade arm shaft, a gear on each folding blade shaft adapted to be driven by the stationary gear as the folding blade arm shaft rotates, and means for frictionally transmitting rotation from the stationary gear to the shafts frictionally, whereby the folding blades may stop rotating by overcoming the frictional resistance for the purpose of preventing damage in case of a jam.

11. In a folding cylinder, the combination with the cylinder proper, of a plurality of pins each having a separate motion carried within the cylinder, individual closed-path cams inside the cylinder for operating the pin motions, and a change speed connection located within the cylinder for operating all of the cams.

1,900,535. METHOD OF AND APPARATUS FOR FEEDING PAPER TO PRINTING PRESSES. Henry A. Wise Wood, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed May 13, 1930, Serial No. 451,965. Renewed July 29, 1932. 7 Claims. (Cl. 101 — 225.)

3. The combination with a printing press, of supports for a web roll located below and at one side of the press one over the other, so that the axis of the web roll is located in a

Continued on page 22

ANNOUNCING

THE ALL-PURPOSE

TRADE LINOTYPE MARK

Now you can set every line of type from 5 to 144 pt. on Linotype slugs.

THIS ADVERTISEMENT IS SET ENTIRELY ON THE A-P-L, FROM THE 144-POINT INITIAL TO THIS 5-POINT CREDIT LINE

MERGENTHALER LINOTYPE COMPANY, BROOKLYN, NEW YORK

Latest Printing Equipment Mechanisms

After having read about the new equipment described, it will pay you to write to the manufacturer for further details about those new devices which it might be profitable to install in your plant.

Hacker Type High and Slug Body Gauges

Two new gauges for composing room use are being made by the Hacker Manufacturing Co., 320 South Honore St., Chicago, Ill. One instrument is for measuring type high dimensions of type and slugs, and the other gauge is for checking the body measurements of line-casting machine slugs and individual types.

Before operation, the Hacker Type Gauge for Height is set to zero on the 0.918 in. gauge. Type is placed in a corner stop and while held with the fingers is slid under the spindle of the dial test indicator. For average measure, line slugs are placed face down against a fixed back stop, then slid along under the spindle. The needle will indicate the printing height in thousandths of an inch. High letters are indicated by the polish given to the characters by sliding the slug along the ground base plate. These letters can be measured by face-up reading.

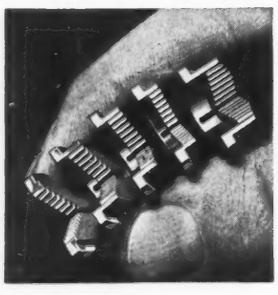
A small attachment for the Type High Gauge can be furnished to measure the depth of drive on Linotype, Intertype and Monotype matrices.

The Hacker Slug Gauge for Thickness is used by depressing a hand lever to raise the pressure feet and indicator spindle. A slug is inserted and the pressure released. The dial needle will point to body thickness of the slug in thousandths of an inch. Measurement at different points will show instantly how uniform the slug is top to bottom and end to end. Rib side down is the quickest way since location of ribs can be ignored. When measuring rib side up, the pressure feet are beside the rib and the plunger is directly on the rib. A back stop positions the shoulder of the slug directly under the indicator plunger.

These Gauges were designed for use on the makeup or dumping table to check a slug or type from each take as it is delivered.

The Type High Gauge weighs 13 lbs. and occupies a space of 6 in. x 7¼ in. The Slug Gauge weighs 12 lbs. and occupies a space 5¾ in. x 7½ in. and has a body thickness capacity for all slugs up to 14 pts.

Newly-Improved Wide-Tooth Matrix



Intertype Corporation, 360 Furman St., Brooklyn, New York, recently announced a new method of manufacture whereby it is now possible to make every tooth on every Intertype matrix extend more than half-way across the thickness of the matrix body. Heretofore the lowest pair of opposed teeth on some matrices could not be extended very far because the narrow space between them would not permit a strong enough cutting tool to be used.

The object of this improvement in the Intertype wide-tooth matrix, it is stated, is to provide wide teeth even for those matrices which travel only on the last or lowermost pairs of teeth. Or, stated in another way, matrices for the auxiliary magazines which have only the lower pairs of teeth to support them while traveling on the second elevator and the distributor bars are now provided with teeth of the same extended width as on all other Intertype matrices.

To make possible the formation of wide lower teeth, the manufacturers relate that a special operation has been introduced. A small hole is now drilled partially into the matrix body parallel to the teeth and at such height that the undersides of the last pair of teeth are substantially formed by the hole. Thus, when the combination teeth are formed, the relatively weak bottom rib on the broaching cutter is amply strong for the purpose because there is practically no metal to be cut away by this rib in finally forming the bottom teeth.

To avoid the necessity of the usual saw slot for clearing the distributor box bar point, the manufacturers have introduced a further new operation. An elongated recess is milled into the body of the matrix and intersects the small hole which removes the metal from beneath the lowest pair of teeth. By limiting the depth of the hole as well as the recess, the usual 0.028 in. wall for the box bar point is formed without saw-slotting.

Webendorfer Automatic Offset Job Presses

Many kinds of commercial work may be produced with hairline register at high running speeds on the new Webendorfer Offset Automatic Job Presses, manufactured by the Webendorfer-Wills Co., Inc., Mount Vernon, New York.

The New Webendorfer Automatic Offset Job Press Which is Made in Two Sizes. It is Claimed This Press Will Do a Wide Range of Commercial Work at High Operating Speeds.

These presses are supplied in two sizes—13 in. x 19 in. and 18 in. x 23 in.

The printing cylinders are of heavy construction, running

Now...Guillotine cutter operation made safe and easy with G-E Thrustors

This installation in a large Eastern printing plant shows a Thrustor-controlled guillotine cutter arranged for one-man operation. Where two men operate a cutter, Thrustor control can be easily adapted to protect the hands of both. Note the simplicity of equipment, and obvious safety. Arrow indicates the Thrustor—mounted out of the way, under the cutter

THIS new safety control for cutters, which includes the G-E Thrustor, can be readily applied to any guillotine paper cutter, old or new, with these advantages:

1. SAFE and EASY. Both hands are in use, at push buttons conveniently located on the cutter, away from the cutter knife.

2. NONREPEAT. Cutter knife cannot make a second stroke, no matter how long the operator holds the push buttons. Both buttons *must* be released and pressed *again* to make another cut.

3. HELPS PRODUCTION. Device need not be "fooled" or "plugged" to maintain production. Operators like it, because it gives them confidence.

These features, alone, make it worth your while to obtain complete information on this simple, reliable, and inexpensive control system. It may pay for itself many times over by *preventing* just one accident; considerable interest in it has been shown by insurance companies. Use the coupon to obtain the facts.

GENERAL ELECTRIC

TEAR OUT AND MAIL FOR COMPLETE INFORMATION

General Electric Company, Industrial Department,
Schenectady, New York

Please send me complete information on your new Thrustor control for guillotine paper cutters*.

Name .....

Company .....

Address .....

.....

*Note: Although this development was made primarily for guillotine paper cutters, it may also be applied with equal value to die- and embossing-presses. Would you also be interested in receiving information on such applications?

Yes No

A

THIS new development again emphasizes the ability of General Electric to meet the ever-changing requirements of the printing and publishing industry. General Electric is prepared to furnish complete electric equipment for all applications in your plant —motors, controllers, transformers, wire and cable, lighting systems, etc.

301-125

Speedy Certifieds

No. 2 of a Series of Whys and Wherefores of Certified Dry Mats

Test after test under actual working conditions has shown conclusively that Certifieds are the speed mats—the fastest scorching mats on the market and the surest in casting.

In a certain large metropolitan foundry Certifieds are being dried in an Automatic Former in 50 seconds flat. A minute is the longest that any Certified need be scorched to be dried thoroughly and so that it will cast singularly free from buckles and chills.

To press in 3 to 5 minutes after the starter has been delivered to the stereotype foundry is not unusual with Certified Dry Mats on the job. And please bear in mind that with Certifieds it is seldom necessary to discard the first cast; in fact, in most plants the first cast is always used.

Hundreds of stereotypers testify to the speedy and dependable performance of Certifieds from their experience with them over a period of years, in some instances running on to well nigh 10 years.

But remember, speed is not the only feature of Certifieds in newspaper production. Easy molding, singular freedom from chills and buckles, and facile casting, combined with speed, make Certifieds the outstanding value in dry mats.

This is your invitation to try some Certifieds in your own plant, under your own working conditions. You will find that they foster and help maintain harmony between composing room, stereotype foundry and pressroom.

We are gladly at your service.

Certified Dry Mat Corporation,
342 Madison Ave.
New York, N. Y.

(Date)

Gentlemen:

You may enter our order for prompt shipment of_____case(s) of Certified Dry Mats as checked below:

☐ Check 15c Ace mats f.o.b. West Groton, Mass.

☐ Check 12c Certifieds f.o.b. West Groton, Mass.
(Cases contain 500 mats, 20" x 24")

▼ ▼ ▼

Please send samples of ☐ 15c Ace Mats ☐ 12c Certifieds free of charge and without obligation.

Please be sure to check specifications.

THICKNESS
☐ .024/5"
☐ .027/8"
☐ .031/2"
☐ .035/6"

SHRINKAGE
(Mill Moistened)
☐ 1/4"
☐ 3/8"
☐ 1/2"
☐ Unconditioned
Special Size

Name_____ Address_____

By_____ Title_____

in oversize precision anti-friction bearings, so arranged that if a sheet of paper does not feed into the press, the printing cylinders will trip automatically and the form rollers will trip automatically at the same time.

On both presses the feeders are of the automatic suction type which are simple in design and construction and may be set quickly for stock of different sizes and weights. Paper can be loaded and unloaded easily and all controls are placed for greatest convenience.

The inking mechanism consists of two form rollers for the 13 in. x 19 in. press and three form rollers for the 18 in. x 23 in. press, four vibrating steel drums, three intermediate composition rollers, one steel rider roller, one ink ductor roller, one ink fountain with adjusting screws extending its full length.

The water motion consists of two form dampening rollers, one brass vibrating roller, one ductor roller and one water fountain with fountain roller. A very convenient method is supplied for regulating the amount of water, also a handy trip for tripping the whole dampening apparatus when not required.

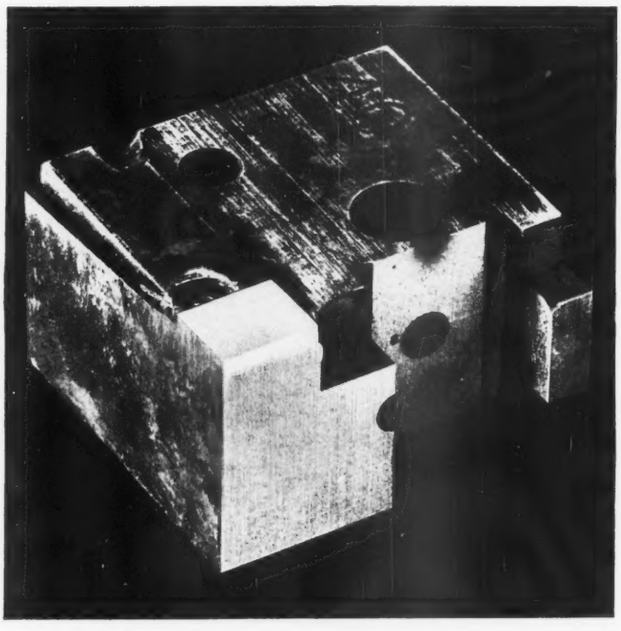
The 18 in. x 23 in. press is fitted with positive pile delivery and the 13 in. x 19 in. press has a jogger delivery, although the pile delivery can be supplied to the smaller press at additional cost.

The floor space required for the 13 in. x 19 in. press is 38 in. x 55 in., and its net weight is approximately 1800 lbs. The floor space required for the 18 in. x 23 in. press is 50 in. x 70 in., and its net weight is approximately 2500 lbs.

Presses are supplied with motors, starters and all necessary wiring.

An Improvement in Monotype Molds

After extensive experimentation and tests, the Lanston Monotype Machine Company has recently announced an improvement in the wearing qualities of its composition molds through the use of Haynes Stellite. This is a very hard wear-resisting material which, by means of the oxy-acetylene blowpipe, is applied in a layer to the mold blocks, in their rough state, at the point which is to form the matrix seat—that is,

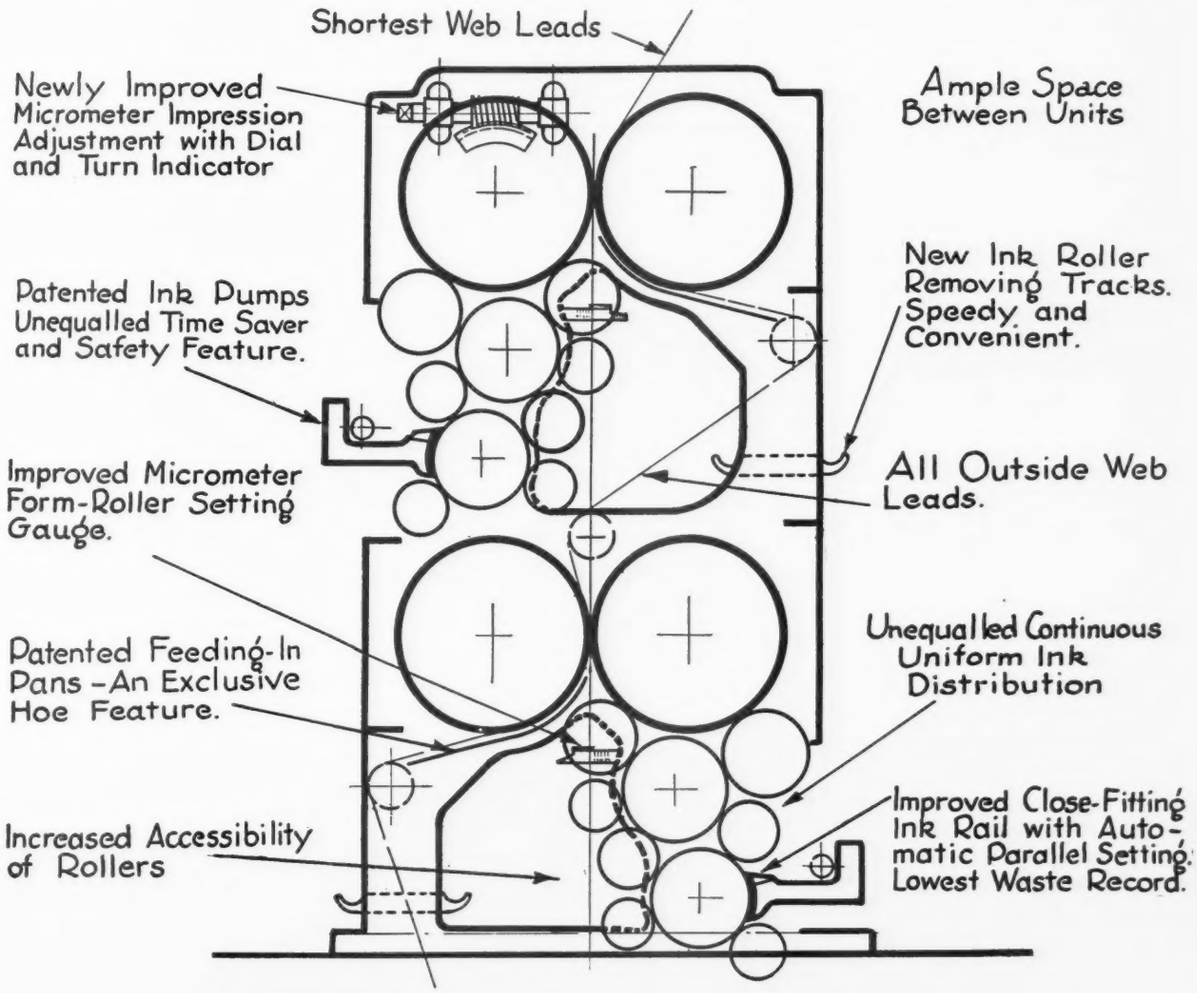


Stellite has been applied to the matrix seat of this Monotype Mold Block before finishing in order to lengthen the life of the matrix seat.

the place where the matrix is pressed against the top of the mold to form the character on the type.

Monotype molds have always been made with hardened

HOE SUPER-PRODUCTION PRESS


Shortest Web Leads
Newly Improved Micrometer Impression Adjustment with Dial and Turn Indicator
Ample Space Between Units
New Ink Roller Removing Tracks. Speedy and Convenient.
Patented Ink Pumps Unequalled Time Saver and Safety Feature.
All Outside Web Leads.
Improved Micrometer Form-Roller Setting Gauge.
Unequalled Continuous Uniform Ink Distribution
Patented Feeding-In Pans - An Exclusive Hoe Feature.
Improved Close-Fitting Ink Rail with Automatic Parallel Setting. Lowest Waste Record.
Increased Accessibility of Rollers

FIRST IN NUMBER
OF ORDERS AND VOLUME OF BUSINESS

IRVING TRUST COMPANY, RECEIVER IN EQUITY FOR

R. HOE & CO., INC.

GENERAL OFFICES

138th Street and East River, New York City

BOSTON • CHICAGO • SAN FRANCISCO

steel seats, but Haynes Stellite is harder than any steel can be made. It will, therefore, increase the length of time a mold may be used before it wears down to the point where it requires restoring to height to keep the height of the type correct. Just how much longer stellited molds will last has not yet been determined, as some of the first molds thus treated are still in use. It has been conclusively proven, however, that the length of time should be at least doubled. When it is considered that a mold operated continuously will produce a million and a half type per week—it will be readily appreciated how essential is this protection from wear.

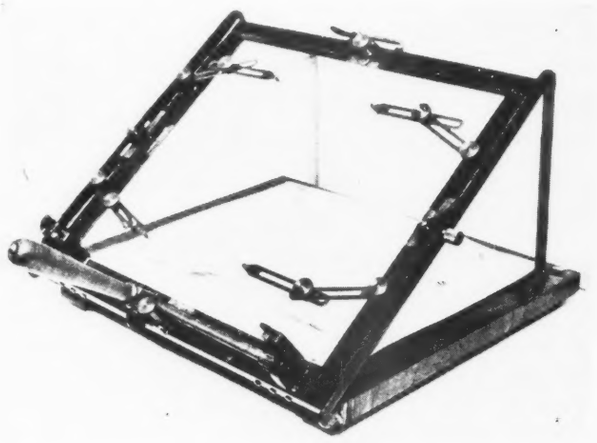
True to its policy of taking care of its older customers, the Monotype Company has made this improvement in such manner that these stellited mold seats are automatically applied to all composition molds sent in by customers for restoring to height in addition to being standard on new composition molds.

Register Rack for Color Mats

Accurately registered mats, it is claimed, are now being obtained from the new Hoe Color Matrix Registering Rack in a number of the country's leading newspapers. A brief description of this device is as follows:

The register rack is used to mark matrices for multi-color printing plates in such a way that the plates will register on the press with the least possible adjustment.

The key matrix, having been marked either with a pencil or by a mark on the chase at the center of each side of the printed matter, is placed below the hinged frame of the rack. This frame is then lowered to rest on a stop, thus permitting the operator to align the matrix so that the marks thereon coincide with the piano wire strung at right angles across the center of the frame. Tripping the stops locks the matrix below the frame and the four needle points are then set to points which are common to two or more of the color mats. By pulling the lever the key mat is marked by slits to which it is trimmed on a matrix shears. The various color matrices are then consecutively registered to the needle points (the piano wires may now be disregarded) and marked by slits as previously described.



Hoe Register Rack which is used to match color plate matrices in such a way that the plates will register on the press with the least possible adjustment.

With all matrices trimmed to these marks, the colors should lie in exact position, obviating the necessity of shimming, carding and trimming of plates which is now the general practice in obtaining color register. The register rack also indicates any variation in shrinkage of the matrices or "fit" of the design so that if it occurs the mat may be replaced or the difference adjusted to the best advantage.

Further information may be obtained from R. Hoe & Co., 138th St. and E. River, New York, N. Y.

CUT MOUNTING TISSUE

Saves time and labor. Will not skid or slip. Eliminates use of tacks.

Price $1.00 per roll

Also Steel Mounting Tacks

FUZON PREPARED PACKING FELT

UNEQUALLED FOR HOT SCORCHING

All gauges in sheets 16 x 18 inches

Price 5 cents per sheet

No charge for stripping sheets to desired widths

SUPERIOR TAIL BOARDS

FOR FLAT OR CURVED CASTING BOXES

Always uniform — and extra tough insuring stereotypes and bases free from imperfections. In all sizes.

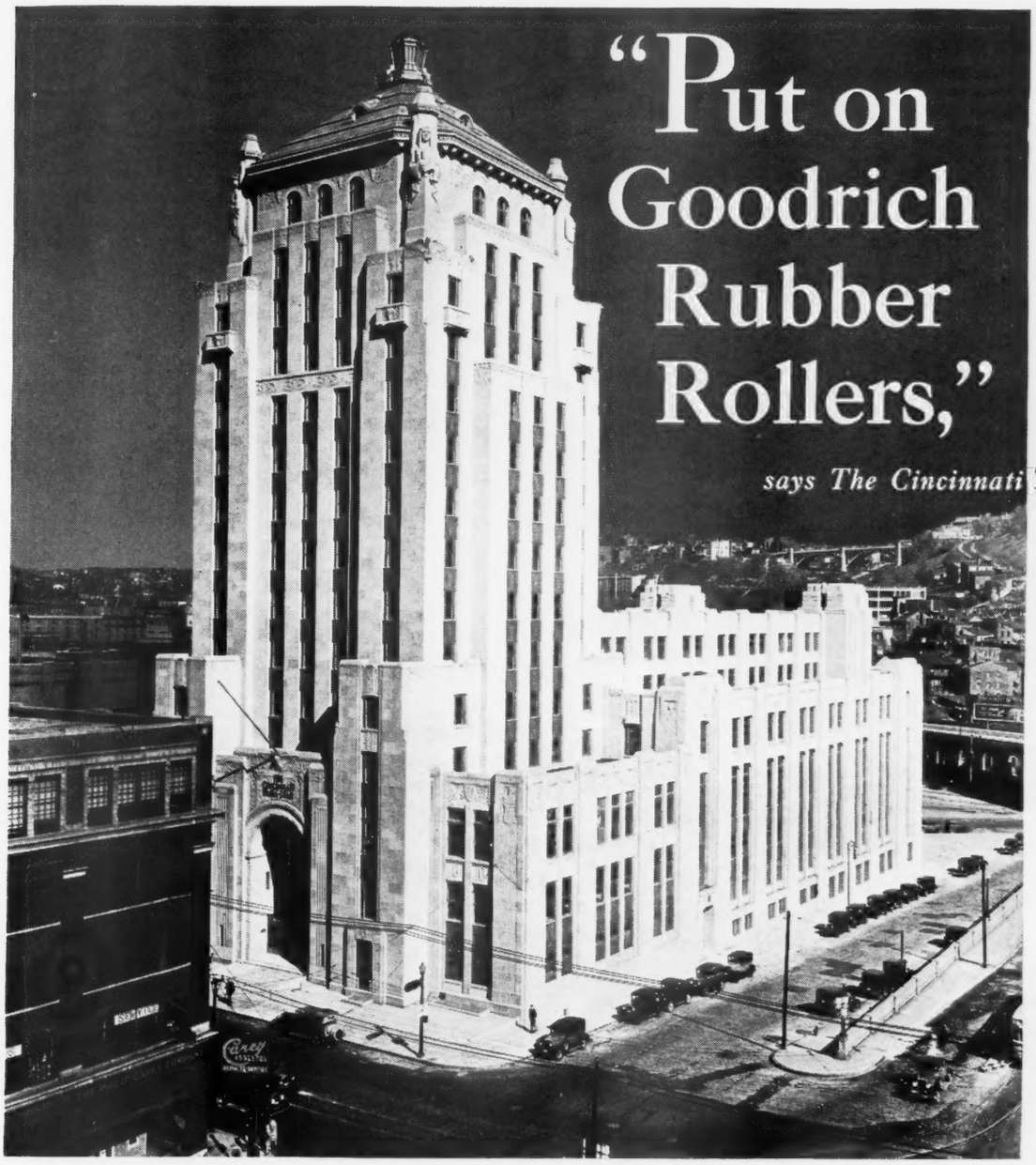
ASBESTOS SCORCHER CLOTH

FOR ALL TYPES OF MACHINES

In all standard widths, plain or wire woven, $\frac{1}{16}$ or $\frac{1}{8}$ (extra heavy).

Also Asbestos Paper and Asbestos Thread

AMERICAN PUBLISHERS SUPPLY
WEST LYNN, MASSACHUSETTS



"Put on Goodrich Rubber Rollers,"

says The Cincinnati Times-Star

RIGHT in the country's "rubber" state the newspaper plant of the year specifies Goodrich Rubber Rollers.

They wanted to have the best plant they could plan. They wanted to print one of the best looking papers there is. So when they ordered equipment for their new Presses they specified Goodrich Rubber Rollers.

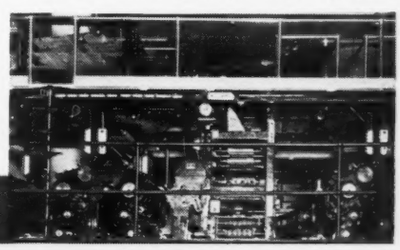
The Cincinnati Times-Star know what Goodrich Rubber Rollers do. They've heard the reports from other plants that have them. And everywhere results are the same.

Type prints sharp. Cuts sparkle. Halftones have bright high lights—dense blacks. Summer or winter—on dry days or damp—printing is better.

At the same time Goodrich Rollers save money. They don't hold dirt—need no cleaning. You save the time and materials you used to spend in wash-ups. You save, too, in replacements. Goodrich Rollers last for years. They always more than pay for themselves in extra wear alone.

Let us tell you more about what Goodrich Rollers can do in your plant. Write today for all the details..

(Below) The New Wood Presses for The Cincinnati Times-Star. Goodrich Rubber Rollers were specified.



NILES & NELSON, INC., EXCLUSIVE DISTRIBUTORS

75 West Street, New York · 400 West Madison Street, Chicago, Ill.

Goodrich *Printers'* Rollers

Denver Post

Tested A Sample Lot

IN February, 1930, this great newspaper of the West, as if to follow its masthead statement—"no good cause shall lack a champion"—ordered a sample shipment of Wood Dry Mats. The approval began at once and since March, 1930, the "championing" has continued.

You can begin now. Use the coupon —for sample Mats or Hand Mitts for your men.

Paper_____

City & State_____

By_____

√

____Trial Case (500 mats) or____Samples

____Standard 12c____Special 15c____Metropolitan 18c

____Conditioned or____Coated

Shrinkage desired_____

Number of Hand Mitts wanted_____

WOOD DRY MATS
ALWAYS UNIFORM

WOOD

FLONG CORPORATION
HOOSICK FALLS, N.Y.

Clerevu Magnifier

A new magnifying instrument, originally designed to make reading easier for persons with poor eyesight but which has been found to have a wide range of usefulness for artists, engravers, printers, proofreaders, and others has just been placed on the market. It is said to be adapted wherever critical examination is necessary.

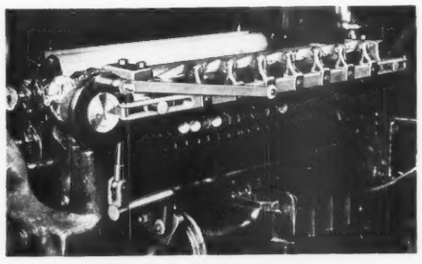
The instrument, known as the Clerevu Table Magnifier, has a 6-in. magnifying lens of fine, clear white optical glass, accurately ground and highly polished. The lens is attached to an adjustable swinging arm; the whole solidly mounted on a metal base and finished in black and silver.

Among the advantages claimed for the Clerevu Magnifier are that it gives a wide, flat, clear magnified field, free from distortion and chromatic colors. The lens permits the use of both eyes, thus avoiding eyestrain. The adjustable arm permits the lens to be kept parallel to the object. It is fully adjustable for focusing and for position, and leaves both hands free for working under the magnifier.

Further information may be obtained by writing Clerevu Instrument Corporation, care of PRINTING EQUIPMENT ENGINEER.

Ortleb Agitators for Various Presses

Through the medium of a "mechanical hand" as the Ortleb Ink Agitator has been called, automatic agitation of printing ink in the fountain can now be done mechanically on the Miehle Vertical Press. Ortleb Ink Agitators are also available for use on high-speed automatic cylinders, large rotary and offset presses and flat-bed cylinders.



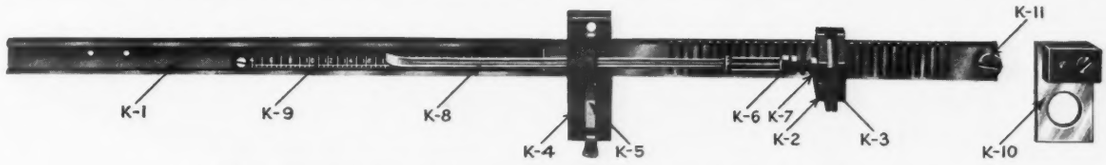
Ortleb Ink Agitator Applied to Miehle Vertical Press

This device, as applied to the press, keeps the ink mixed at all times by means of steel fingers which are operated automatically through motion of the press to which it is attached. The ink is urged against the fountain roller at all times and the intermittent motion of the agitating fingers insures proper suspension of the pigment in the carrying vehicle, providing a means of proper feed and uniformity of color.

The claim is also made that a saving of 10% to 30% will be made in the ink consumed. Slip-sheeting and offsetting, or smudging, are also avoided, and short, stiff inks may be used successfully at any normal press speed.

Further particulars may be obtained from George Ortleb Co., 2513 Baldwin St., St. Louis, Mo.

Foster Improved Intertype Assembler Slide



MORE EFFICIENT! NOTHING TO WEAR OUT OR BREAK!

1—All wearing surfaces are hardened. Consider what this means where the brake blocks grip the bar.

2—The teeth of the Assembler Bars are an em wide and should last indefinitely. The breaking of the teeth on the former style has been a source of expense as well as annoyance and time lost, on the part of the operator.

3—The Assembler Slide Clamp is of rigid construction and will last the life of the machine.

4—The Assembler Slide Clamp Pawls have no side play or small teeth to break. They will not slip or wear. No binding of the clamp as with the old style.

5—Journal pins and rods are of the best quality steel.

6—No dragging slides on their return.

7—No broken teeth.

8—No slack of a half em or more when setting assembler slide.

9—It speeds production and saves the operator's disposition.

Price Only $11.50 complete. $1.00 Additional for Old Machines Using Old Style Bar with Eccentric Pin Set

ASK FOR COMPLETE CIRCULAR • • • • SHIPPED ON "10-DAY APPROVAL"

Reduction in Price on Ace Round Belts

Not only have these belts been further strengthened by making them *oversize*, but a reduction is made in cost on the following types: Distributor Belts from $1.75 to $1.35 each; Assembler Driving Belts from $1.25 to $0.95 each.
(Both Linotype and Intertype)

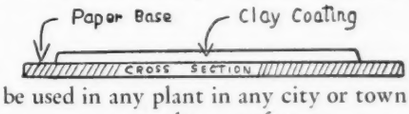
Let us tell you why "STARS" are the most economical spacebands you can buy!

LINOTYPE PARTS CORPORATION

203 Lafayette Street, NEW YORK CITY
1520 Georgia Avenue, LOS ANGELES, CAL.
Agencies: 318 West Randolph Street, CHICAGO, ILL.
314 West 10th Street, KANSAS CITY, MO.

Redimat and Redicast for Making Stereotype Cuts

Officials of Redimat Sales Co., 520 North Michigan Ave., Chicago, Ill., have announced what they claim is a low-cost, fast method of producing stereotype plates locally. The process can be used in any plant in any city or town in which ordinary paper mats are used to cast from.



Redimat is a clay-coated paper base mat. The drawing or lettering is laid out or traced on the clay coating which is easily drawn through yet holds the finest lines or details. The drawing or lettering it etched through the clay coating to the polished surface of the board (mat) with Redimat drawing tools, thus preparing a mold or matrix ready for casting (stereotyping).

This mat has been used also to some extent to lessen makeup time in ads where odd-shaped boxes and curved layout arrangement requires great care. Panels, circles, etc., may be drawn on Redimat, the plate mortised and type set in. Individual headings, cartoons, style sketches, handwritten lines, price marks and layout arrangements for use in advertising can be produced with Redimat equipment.

Another product, called Redicast, has also been announced. This is an ink for making reverse stereotype cuts—black background around white letters. The ink flows from any type pen or brush like any good drawing ink when applied to a heavy grade Strathmore, bristol or drawing board. Upon drying and after the molten metal comes in contact with the mat, the letters or design stand out from the board in relief. This provides a mat from which a stereotype cast may be made like any regular paper mat.

Chemical Regraining of Offset Plates

In preparing used offset printing plates for reuse, a means of removing the bichromated albumen and ink films from the plates by chemical rather than mechanical means in being sought by the Division of Tests and Technical control, U. S. Government Printing Office. In his annual report to Public Printer Carter, B. L. Wehmhoff, technical director, states that a study of this problem shows that the major portion of the time is spent removing the old film rather than in preparing the surface of the metal itself for reuse.

It is now customary to remove the old films and regrain the plates in a mechanical graining machine for a period of 30 to 45 minutes. A few tests which have been made indicate that chemicals may be used to clean the plates satisfactorily without regraining.

Mr. Wehmhoff states that tests are under way to determine the best formula for the cleaning solution, to ascertain the number of times plates may be washed and used without regraining, and the length of run it is possible to get from such plates. Even if regraining is found necessary to obtain the required surface, not over 10 minutes' time on a graining machine will probably be necessary, and that possibly only after the plates have been cleaned chemically several times.

"Let's Have a New Deal on Type Metal"

"NEW DEALS" are in style now. The example being set by the government can well be followed in many printing plants. For example, why not have a new deal in type metal?

A new deal in type metal does not mean purchasing metal at the lowest price per pound that can be obtained. Rather, it calls for a study of your type metal problems and a selection of a type metal and a service plan that will in the long run give your plant the utmost in type metal efficiency at the lowest yearly metal cost.

Because the Imperial Type Metal Company specializes in type metal—manufactures nothing else but type metal—we are in a position not only to render the best possible type metal service but to produce metals that give better and cleaner results at lower yearly metal costs.

Imperial
METAL

THE IMPERIAL TYPE METAL CO.
Philadelphia · New York · Chicago · Los Angeles

March Printing Patents

(Continued from page 12)

vertical position and a vertical guide roll in position for guiding the web from the web roll into the press.

1,900,543. COMBINED INK DRYING AND NEUTRALIZING DEVICE. Charles Henry Cochrane, New York, N. Y. Filed Nov. 26, 1930. Serial No. 498,399. 6 Claims. (Cl. 175 — 264.)

1. In a device the combination of a suitable electrical conductor, the electrical conductor being charged with high potential alternating electrical energy, a suitable insulating covering embracing the electrical conductor, and a plurality of suitably shaped inductive electrical members positioned and held upon the insulating covering for the purpose of creating electrical breezes, and insulating means to completely cover and protect the plurality of inductive electrical members.

1,900,660. MATRIX BOARD FOR STEREOTYPING. Anton Rudolph Pawlitschko, Little Ferry, N. J., assignor to Western Newspaper Union, a Corporation of Delaware. Filed Oct. 13, 1930. Serial No. 488,543. 3 Claims. (Cl. 91 — 68.)

1. The process of preparing matrix boards of the type used in stereotyping, which comprises the step of impregnating the surface of matrix paper with a suspension in water of graphite and a resinous material which is hard at normal temperatures.

1,900,664. PRINTING PRESS. Carl G. Pritchard, Hiram, Ohio, assignor to Harris-Seybold-Potter Company, Cleveland, Ohio, a Corporation of Delaware. Filed Oct. 31, 1930. Seria No. 492,391. 13 Claims. (Cl. 101 — 415.1.)

1. In combination, a printing cylinder, a tubular plate fitted over the cylinder and spring-pressed radially movable means within the cylinder to tension the plate thereon.

1,900,813. PSYCHROMETER. Earl Vernon Hill, Chicago, Ill., assignor to E. Vernon Hill Company, a Corporation of Illinois. Filed May 7, 1930. Serial No. 450,576. 2 Claims. (Cl. 73 — 24.)

1. In a psychrometer comprising a body having a dry and a wet bulb thermometer mounted thereon and relatively movable concentric scale members pivotally secured to the body, the combination of a handle for whirling the body pivotally mounted to the pivot of the concentric scale members.

1,900,923. PRINTING PRESS. Fritz Fallert, Bern, Switzerland. Filed Mar. 24, 1931, Serial No. 524,834, and in Germany June 29, 1928. 5 Claims. (Cl. 101 — 269.)

1. In a printing press, having vertically disposed printing beds and having impression cylinders provided with channels and mounted in a rising and falling slide, a drive and control arrangement, comprising vertical racks mounted on the frame of the press, pinions connected with the impression cylinders and engaging said vertical racks during the movement of the slide, a toothless gap on the periphery of each of the pinions corresponding to the channels on the impression cylinders, an auxiliary driving mechanism for bridging over the gaps in the driving pinion and for initiating the rotation of the printing cylinders and means for bringing the auxiliary driving mechanism into operation in such a manner, that the impression cylinders gradually are brought from a standstill to the full peripheral velocity.

1,900,986. DEVICE FOR THE CLAMPING OF FLEXIBLE PRINTING BLOCKS OR STEREOS ON THE FORM-CYLINDER OF COPPERPLATE OR INTAGLIO PRINTING MACHINES. Peter Gietz, Johannisberg-on-the-Rhine, Germany, assignor to Maschinenfabrik Johannisberg G. m. b. H., Geisenheim-on-the-Rhine, Germany. Filed Aug. 6, 1931, Serial No. 555,600, and in Germany Dec. 29, 1930. 1 Claim. (Cl. 101 — 415.1.)

A device for clamping flexible printing blocks or stereos on the form-cylinder of copper plate or intaglio printing machines, comprising in combination with the form-cylinder having a groove of dove-tail shaped cross-section in the periphery extending in the axial direction of the cylinder and with printing block or stereo bent at the ends, a clamping wedge, a clamping ledge, on one of the bent ends of the printing block or stereo cooperating with the wedge, and a projection of the clamping ledge interposed between the under surface of the wedge and the bottom of the dove-tail groove so that the ledge is not only moved in the direction of the circumference, but also pressed in the direction towards the axis of the form-cylinder.

1,901,013. PROCESS AND APPARATUS FOR PHOTOGRAPHIC TYPE-COMPOSING. Edmund Uher, Jr., Budapest, Hungary, assignor to Uhertype Aktiengesellschaft, Glarus, Switzerland. Filed June 25, 1930, Serial No. 463,761, and in Germany May 5, 1930. 12 Claims. (Cl. 95 — 4.5.)

1. A photographic type-composing process, comprising setting up by a succession of manual operations separate movable control bodies each representing a printing character, and deflecting a beam of light into a direction determined by certain dimensions of each of the control bodies in succession, thereby causing the corresponding printing characters to be photographed on a moving sensitized strip.

1,901,049. PROCESS FOR THE PRODUCTION OF GENUINE WATERMARK PAPERS WITHOUT USING RELIEF MOLDS. Friedrich von Heinrich, Budapest, Hungary, assignor of one-half to National Bank of Hungary, Budapest, Hungary, a Corporation of Hungary. Filed Oct. 15, 1931, Serial No. 569,113, and in Austria Oct. 20, 1930. 2 Claims. (Cl. 92 — 48.)

1. The herein described method of producing gradations or half tones in the watermarks of paper, comprising the making of a photographic half tone reproduction of the design to be used as a watermark, decomposing the reproduction by a line screen, and reproducing the decomposed reproduction on a paper forming surface with the water permeability of the surface at various places proportional to the light tone values of the corresponding parts of the photographic reproduction, the water permeable and water impermeable parts of the surfaces corresponding with the resist covered and uncovered parts of the screen decomposition of the half-tone picture.

1,901,075. CHANGEABLE ROTARY PRESS. Henry F. Bechman, Battle Creek, Mich. assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed Sept. 13, 1924. Serial No. 737,553. 12 Claims. (Cl. 101 — 220.)

1. A rotary printing press having interchangeable plate and impression cylinders respectively adapted to print sheets of different lengths; and means for leading a web in either direction between the plate and impression cylinders; with means for inking the plate cylinders including inking drums and ink distributing rollers cooperating with the drums; and means whereby the ink distributing rollers can be set at either side of the ink drums in accordance with the lead of the web and direction of rotation of the plate cylinders.

1,901,076. CHANGEABLE ROTARY PRESS. Henry F. Bechman, deceased, Battle Creek, Mich., by City National Bank & Trust Company of Battle Creek, Battle Creek, Mich., administrator, assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Original application filed Sept. 13, 1924, Serial No. 737,553. Divided and this application filed May 5, 1930, Serial No. 450,008. Renewed Aug. 16, 1932. 9 Claims. (Cl. 101 — 247.)

1. In a rotary cylinder web printing press, a main frame provided with a plurality of aligned openings in each side frame for the reception of journal boxes, each opening having an inclined side; rectangular journal boxes mounted in the openings; plate and impression cylinders mounted in the boxes, the cylinders being changeable in accordance with the length of page to be printed, wedge plates for laterally adjusting the plate cylinder boxes in their openings in accordance with the size of the cylinders employed, means for adjusting the wedges and means for leading a web through the press and between the plate and impression cylinders to be printed thereby.

1,901,113. SLUG CASTING MACHINE. Richard R. Mead, Queens Village, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Aug. 8, 1930 Serial No. 473,964. 18 Claims. (Cl. 199 — 55.)

1. A slug casting mold comprising side and end walls which define between them a cavity wherein the slug is cast, one of the side walls of the mold being fixed as a whole, and the other side wall thereof presenting a relatively fixed rear section which determines the effective front section which restricts the width of the mold cavity at the front.

1,901,284. PRINTING PRESS. Frank P. Carlson, Astoria. N. Y. Filed Feb. 12, 1932. Serial No. 592,459. 5 Claims. (Cl. 101 — 358.)

1. A printing press having an inking roller permanently in frictional engagement with the vibrator, adapted to be alternately elevated above and lowered into contact with the press-form through the alternate changes in rotation of the vibrator.

1,901,577. PHOTO-ELECTRIC TUBE. Kenneth T. Bainbridge, New York, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 4, 1928. Serial No. 244,533. 12 Claims. (Cl. 250 — 27.5.)

12. A light sensitive tube comprising a container, electrodes mounted in the container, one of the electrodes including a foundation material, a coating of alkali metal on the foundation material, all of the alkali metal being bound to the foundation material at the volatilizing temperature of the metal by an adsorbed gas layer.

1,901,578. METHOD OF PREPARING PHOTO-ELECTRIC TUBES. Kenneth T. Bainbridge, Swarthmore, Pa., assignor to General Electric Company, a Corporation of New York. Original application filed Jan. 4, 1928, Serial No. 244,533. Divided and this application filed July 8, 1932. Serial No. 621,499. 7 Claims. (Cl. 250 — 27.5.)

2. The method of preparing a light-sensitive coating to a metallic surface, which comprises applying a light-sensitive metal to the surface and then heating the surface in a container and at a temperature sufficiently high to remove substantially all excess light-sensitive metal from the container while the container is being evacuated.

1,901,676. PAPER CUTTER. Arthur Kirkbride Taylor, Baltimore, Md., assignor to United States Printing and Lithograph Co., Baltimore, Md., a Corporation of Ohio. Filed Dec. 23, 1929. Serial No. 416,013. 28 Claims. (Cl. 164 — 48.)

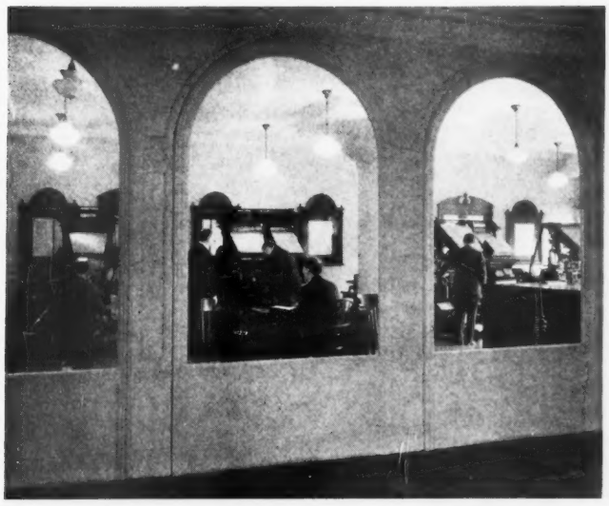
28. In a cutting machine, a cutter, a pusher for feeding material to the cutter, means for intermittently actuating the pusher, means for actuating the cutter, means spaced in any predetermined relation corresponding to the length of material to be cut and arranged stationarily upon the machine, and stopping means for the pusher actuating means including coacting means movable in predetermined relation with the pusher, and responsive to the spaced means, the coacting means being adapted to overrun the spaced means when the pusher actuating means resumes operation after a cut has been made.

Mergenthaler Opens New Linotype Display Room

"One of the most attractive and informative display rooms we have ever seen," is the consensus of many printing and newspaper executives from various parts of the country who have paid preliminary visits to the newly-opened Linotype Display Room at Mergenthaler headquarters, 29 Ryerson St., Brooklyn, N. Y.

"Everything about the room," they agree, "its general arrangement, its furnishings, decorations, the spacious lay-out of the machines, the fine welcome accorded visitors, and the clear and graphic demonstrations given by the experts in attendance make it a pleasure and a profit to anyone in the graphic arts to visit this new display room."

In that room the latest in Linotypes are in operation daily. The machines include a three-magazine Model 8; a Model



25 (multiple distributor, "mixer" machine); a "Two-in-One" Model 26 "mixer" with a 72-channel main magazine and two wide auxiliaries for display faces, and a 90-channel main magazine for body matter; a Forty-two Pica Model 14 (another "Two-in-One" Linotype, with 72 and 90 channel main magazines and wide auxiliaries); and an All-Purpose Linotype, for the casting of type in the form of slugs in faces ranging from 6-point to 144-point.

Featured on these machines are the latest in Linotype developments.

The Mergenthaler Linotype Company extends a cordial invitation to everyone to visit it whenever they find it convenient to do so.

BURGESS CHROME MATS

CHEERFUL SERVICE

with

BURGESS QUALITY

Assures

BETTER PRINTING

with

ECONOMY

BURGESS

CHROME MATS

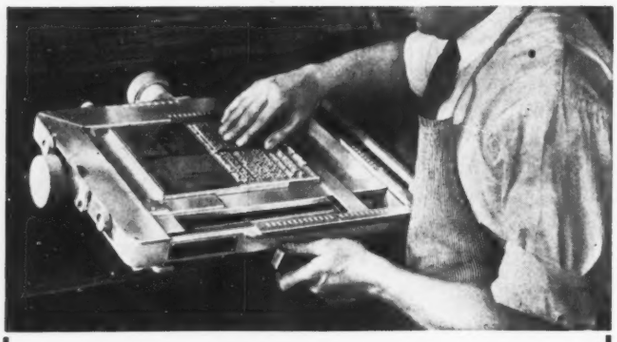
●

BURGESS CELLULOSE COMPANY
Freeport, Illinois

BURGESS CHROME MATS

BURGESS CHROME MATS

BURGESS CHROME MATS



Justification to Lift
in
Original Make-up

Justification to finger pressure in make-up is only an approximation. That it is imperfect is evident by the amount of justification commonly necessary on the stone.

Justification to lock-up pressure in the Hacker Make-Up Gauge is right and complete in the original make-up as checked by lift test.

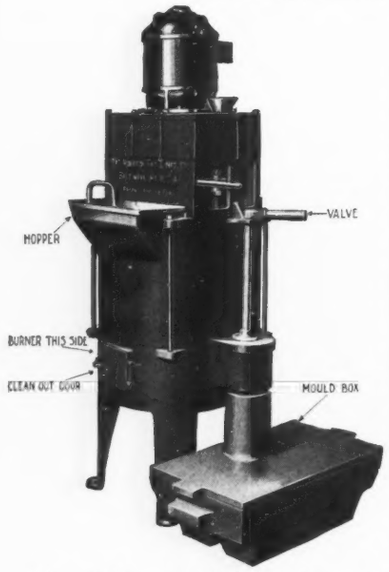
Justification on the stone is entirely eliminated in those plants which are using this amazing new tool.

Send for catalog of the Hacker Make-Up Gauge to

HACKER MANUFACTURING CO.
320 SOUTH HONORE STREET CHICAGO

THE MONARCH METAL RENOVATOR

is used in stereotyping departments for the direct reclaiming of new metal from dross.



It occupies but two and one-half feet of space and is placed preferably near the larger stereotype pots from which the dross is skimmed. The dross can be immediately thrown into the Renovator, thus eliminating storage of same in cans and the packing for shipment to the smelter.

The Monarch Metal Renovator will reclaim from 65 to 75% new metal from your dross, thereby effecting a substantial saving and maintaining the quality of your metal.

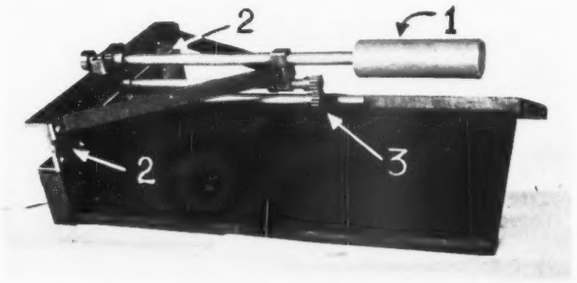
Write for Catalog P.E.E.

The Monarch Engineering & Mfg. Co.
701-702 American Bldg. Baltimore, Md., U. S. A.
WORKS, CURTIS BAY, MD.

Matrix Crimping Machine

By Raymond S. Brown*

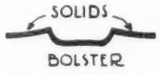
IF ALL parts of a stereotype matrix lay in the same plane there would be no distortion caused by curving the mat to conform to a curved casting box. As, however, the bolster portions of the mat lie on a cylindrical surface nearer the axis than the type portions of the mat, the bolsters are thrown into compression and the solids into tension. This unequal strain causes a distortion of the solids as shown in the accompanying illustration. The distortion increases with depth of impression and degree of curvature. It has the effect of causing the edges of solids and borders to tilt or cup and makes for uneven impression on the plate and light streaks in the solids.



Matrix Crimping Machine which is designed to relieve the compression strains in the bolsters of stereotype mats previous to casting cylindrical plates for tubular presses. In the picture, 1 is the operating handle which is hinged at 2-2. The handle may be raised to permit inserting a matrix between the crimping wheels, 3.

The device illustrated in the halftone was invented by the writer for the purpose of relieving the compression strains in the bolsters, thus allowing the printing surfaces to lie on a true cylinder. It has been used extensively in printing a daily newspaper and found to be very effective. The machine acts by contracting the length of the bolsters in a circumferential direction. It does this by a "puckering" or crimping action on the stock over these areas. The crimping is applied only in the direction of the curvature of the mat as there are no strains to cause trouble in the lengthwise direction.

1—Section of mat before curving.



2—Section of mat after curving (uncrimped).

3—Section of mat after curving (crimped).

4—Crimped mat in cross-section, showing packing.

After the matrix is crimped it will no longer lie flat and should be packed while resting on and conforming to a cylindrical shape such as a chipping block or a blank plate, after which process it is ready for toasting. When the crimped areas are small the mat may be laid on a flat surface for packing but the felt strips should be laid parallel to the axis. The crimping does not lessen the roller clearance of the plate. In fact, if the matrix is crimped deep enough the packing can be applied in two layers, thus increasing the clearance and eliminating much routing.

The crimping wheels are ½-in. face by 1-in. diameter and each wheel has 16 teeth. The large gear has 32 teeth, thus one

*Publisher, *The Evening Republican*, Columbus, Indiana.

turn of the handles gives two turns of the crimpers. The top section of the machine is hinged so that it may be raised while positioning the matrix without throwing the two small gears which drive the crimpers out of mesh. The handle is weighted so that very little pressure is required to crimp a moist mat. In fact, it is possible to crimp the mat after it is packed. If the bolster to be crimped is wide it is necessary to cover it with several parallel rows of crimping.

The use of this machine greatly lessens the amount of time and rubbing required to prepare a mat for casting, particularly in the case of cylindrical plates such as are used on a tubular press.

Prominent Supply Men Pass On

William C. Squibb—Officials of the Godfrey Roller Company, Philadelphia, have announced the death of Wm. C. Squibb, president of the concern, on Sunday, March 19.

Joseph M. Huber—Announcement has been made of the passing of Joseph M. Huber, president of J. M. Huber, Inc., on Friday, March 3.

Will G. Loomis—The many friends of Will G. Loomis will be grieved to learn of his death March 14 in Long Beach, Calif., after a prolonged illness. For the past few years Mr. Loomis has been connected with Harris-Seybold-Potter as a special representative on the Pacific coast. At one time he was vice president, secretary and treasurer, respectively, of the International Printing Pressmen's Union. He is survived by his widow, Mrs. Rose Loomis; a son, Will Grimes, Jr.; two daughters, Mrs. Henry Hoelscher and Mrs. Christy Borth, and four grandchildren.

New Saw Trimmer Organization

The Cheshire & Greenfield Mfg. Co., Milwaukee, Wis., has been reorganized under the firm name of the Milwaukee Saw Trimmer Corporation, with offices and factory at 612 East Clybourn Street, Milwaukee, Wis.

The new company will continue to manufacture the complete line of C. & G. machines, and furnish parts and supplies for the same.

The Milwaukee Saw Trimmer Corporation will be under the management of Mr. Fred W. Billker, who was vice president and superintendent of the old corporation.

Rutherford Machinery Co., New Division

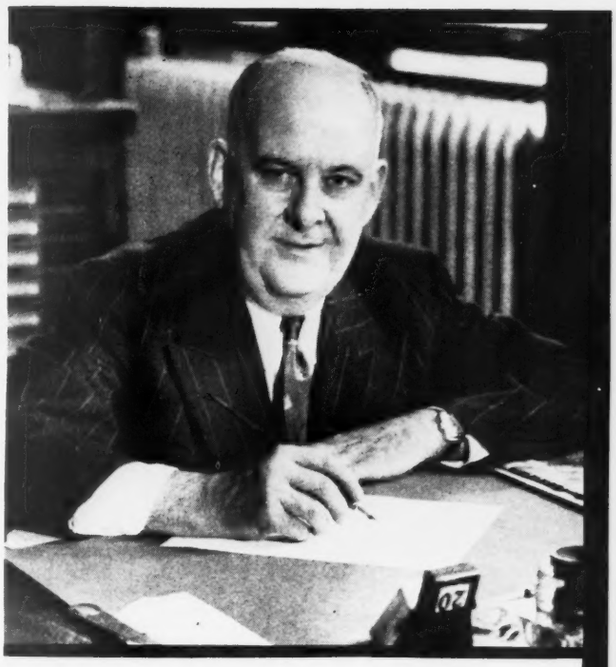
The development, manufacture and sale of machinery which has been handled by the Fuchs & Lang Mfg. Co., Division of the General Printing Ink Corporation, has been transferred to the Rutherford Machinery Co., a new division of the General Printing Ink Corporation.

A. T. Koppe is general manager; W. H. Jackson, assistant general manager in charge of production; and E. G. Schreibeis, eastern sales manager.

The new division will handle photocomposing machines, planograph and color-precision cameras, plate-graining machines, tube and tin-printing machinery.

Metal Balling On Plunger Rod

Metal will "ball" on a line-casting machine pot pump plunger rod when the operating speed is quite rapid so that the molten metal is ejected from the crucible by the pump at a rate faster than the heating equipment can melt the cold metal introduced into the crucible to replace that which has been removed. Another cause may be that the metal temperature is too low. The operator in attempting to overcome porous slugs due to a worn crucible well and plunger, lowers the metal temperature.



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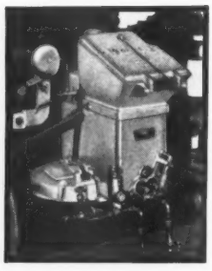

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How to Block Plates—Booklet containing technical data for the proper mounting of relief printing plates.

A Brief Showing of the New Linotype Janson—Specimen pages showing the four available sizes of a revival of the type cut between 1660 and 1687 by Anton Janson.

Type High and Slug Gauges—Circular, 8½ in. x 11 in., illustrating and describing two new bench dial-reading gauges for use in the composing room.

Foster Assembler Slide and Second Elevator Bar and Distributor Box Bar—Folder illustrating and describing a new assembler slide for application to Intertypes, and a folder describing new-style second elevator and distributor box bars for application to line-casting machines.

Employee Handbooks—Twenty-page and cover booklet designed to furnish information in the preparation of company handbooks. Based on a review of the handbooks of sixty well-known companies. Contains suggestions relative to company data, personnel administration, employment, remuneration, hours and attendance, joint relations, health, safety, training and education, economic security, services for employees and general instructions.

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